

CLARKS MEADOW

LOTS 1 - 26

NON-BUILDABLE PRESERVATION PARCELS 'A' THRU 'G'

FOREST MITIGATION BANK

ROADS, STORMWATER MANAGEMENT AND STORM DRAIN CONSTRUCTION PLANS

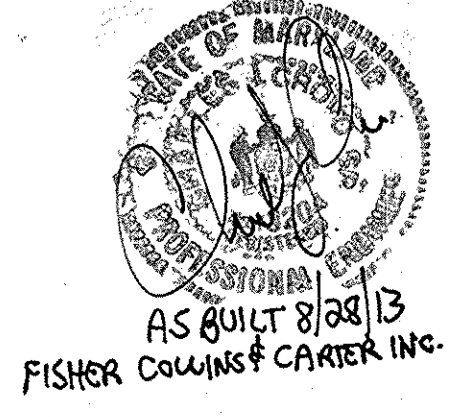
GENERAL NOTES

- THE PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
- THIS PLAN IS SUBJECT TO COMPLIANCE WITH THE FIFTH (5th) EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AS AMENDED AS THE PRELIMINARY PLAN RECEIVED SIGNATURE APPROVAL ON 11-03-2003. THIS PROJECT IS SUBJECT TO COMPLIANCE WITH COUNCIL BILL 50-2001 WHICH AMENDS PORTIONS OF THE ZONING REGULATIONS AS A CONSEQUENCE FOR NOT HAVING PRELIMINARY PLAN APPROVAL PRIOR TO 11-1-2001. DEVELOPMENT OR CONSTRUCTION ON THESE LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE BUILDING OR GRADING PERMIT APPLICATION.
- THE SUBJECT PROPERTY IS ZONED RC-DEO PER THE 2-2-04 COMPREHENSIVE ZONING PLAN. ALL ADJACENT PROPERTIES ARE ZONED RC-DEO PER THE 2-2-04 COMPREHENSIVE ZONING PLAN.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM AERIAL SURVEY WITH 2-FOOT CONTOUR INTERVALS PREPARED BY AIR SURVEY, INC. DATED MARCH, 2001.
- THE COORDINATES BASED ON NAD '83 MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS 217A AND 217B.
- BOUNDARY IS BASED FROM THE RECORD PLAT ENTITLED "CLARKS WOODS 1, LOT 4 AND NON-BUILDABLE PRESERVATION PARCEL A" DATED JANUARY 27, 2000 AND RECORDED AS PLAT NUMBER 14203 ON MAY 4, 2000.
- WATER IS PRIVATE.
- SEWER IS PRIVATE.
- THERE ARE NO EXISTING RESIDENTIAL STRUCTURES LOCATED ON THIS SITE.
- THERE ARE NO BURIAL GROUNDS, CEMETERIES OR HISTORIC STRUCTURES LOCATED ON THE SUBJECT PROPERTY, TO THE BEST OF OUR KNOWLEDGE.
- THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY MARS GROUP IN FEBRUARY, 2003 AND WAS APPROVED UNDER THE PRELIMINARY PLAN FOR THIS PROJECT (SP-03-14).
- A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
- THE GEOTECHNICAL REPORT FOR THIS PROJECT WAS PREPARED BY HILLIS CARNES ENGINEERING ASSOCIATES, INC. IN MAY, 2001 FOR BORINGS 1, 2 AND 3. THE GEOTECHNICAL REPORT FOR BORINGS 4, 5, 6 AND 7 AND THE ADDITIONAL IN-SITU TESTING OF BORINGS 1, 2 AND 3 WAS PREPARED BY HILLIS CARNES ENGINEERING ASSOCIATES, INC. IN OCTOBER, 2003.
- THERE ARE NO WETLANDS, STREAMS, THEIR BUFFERS, 100-YR FLOODPLAIN OR STEEP SLOPES OVER 2% LOCATED ON THIS SITE WITH THE EXCEPTION OF THE PROJECT OF WETLANDS. WETLAND BUFFER AND STREAM BUFFERS LOCATED ON NON-BUILDABLE PRESERVATION PARCEL A ALONG THE COMMON LINE WITH PRESERVATION PARCEL B OF CLARKS WOODS 1. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES OR PLACEMENT OF NEW STRUCTURES IS PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAMS OR THEIR BUFFERS.
- WETLAND DELINEATION IS BASED ON RECORD PLAT "CLARKS WOODS 1, LOT 4 AND NON-BUILDABLE PRESERVATION PARCEL A" DATED JANUARY 27, 2000 AND RECORDED AS PLAT NUMBER 14203 ON MAY 4, 2000.
- THIS PROJECT IS NOT LOCATED WITHIN THE METROPOLITAN DISTRICT.
- THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF 10,000 SQUARE FEET AS REQUIRED BY THE STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA IS RESTRICTED UNTIL PUBLIC SEWER IS AVAILABLE. THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWERAGE EASEMENT. RECORDATION OF A MODIFIED SEWERAGE EASEMENT PLAT SHALL NOT BE NECESSARY.
- OPEN SPACE IS NOT REQUIRED AS PRESERVATION PARCELS 'B' AND 'C' SHALL BE DEDICATED TO HOWARD COUNTY.
- THE PURPOSE OF THE PRESERVATION PARCELS AND THE JUSTIFICATION FOR THE DESIGN OF THE CLUSTER SUBDIVISION IS AS FOLLOWS:
PRESERVATION PARCEL 'A' IS PROPOSED AS A NON-BUILDABLE PARCEL FOR THE PRESERVATION OF THE RURAL CHARACTER OF DORSEY MILL ROAD BY PROVIDING AFForestation, LANDSCAPING AND STREET TREES ALONG THE PROPERTY FRONTAGE AND TO PRESERVE ENVIRONMENTALLY SENSITIVE AREAS INCLUDING WETLANDS, WETLANDS BUFFERS AND STREAM BUFFERS. IT WILL BE PRIVATELY OWNED. IT IS ENCUMBERED BY AN EASEMENT AGREEMENT WITH HOWARD COUNTY AND THE HOMEOWNERS ASSOCIATION. THIS AGREEMENT PROHIBITS FURTHER SUBDIVISION OF THE PARCEL, OUTLINES THE MAINTENANCE RESPONSIBILITIES OF ITS OWNER AND ENUMERATES THE USES PERMITTED ON THE PROPERTY.
PRESERVATION PARCELS 'B' AND 'C' ARE PROPOSED AS NON-BUILDABLE PARCELS TO PRESERVE EXISTING FOREST AND TO PROVIDE AFForestation. THEY WILL BE DEDICATED TO HOWARD COUNTY. THEY ARE ENCUMBERED BY AN EASEMENT AGREEMENT WITH THE HOMEOWNERS ASSOCIATION. THIS AGREEMENT PROHIBITS FURTHER SUBDIVISION OF THE PARCEL, OUTLINES THE MAINTENANCE RESPONSIBILITIES OF ITS OWNER AND ENUMERATES THE USES PERMITTED ON THE PROPERTY.
PRESERVATION PARCEL 'D' IS PROPOSED AS NON-BUILDABLE PARCEL FOR THE PRESERVATION OF THE RURAL CHARACTER OF DORSEY MILL ROAD BY PROVIDING AFForestation, LANDSCAPING AND STREET TREES ALONG THE PROPERTY FRONTAGE. IT WILL BE PRIVATELY OWNED. IT IS ENCUMBERED BY AN EASEMENT AGREEMENT WITH HOWARD COUNTY AND THE HOMEOWNERS ASSOCIATION. THIS AGREEMENT PROHIBITS FURTHER SUBDIVISION OF THE PARCEL, OUTLINES THE MAINTENANCE RESPONSIBILITIES OF ITS OWNER AND ENUMERATES THE USES PERMITTED ON THE PROPERTY.
PRESERVATION PARCELS 'E', 'F' AND 'G' ARE PROPOSED AS NON-BUILDABLE PARCELS FOR STORMWATER MANAGEMENT FACILITIES AS A REQUIREMENT TO CONTROL STORMWATER RUNOFF. THEY WILL BE OWNED BY THE HOMEOWNERS ASSOCIATION. THEY ARE ENCUMBERED BY AN EASEMENT AGREEMENT WITH HOWARD COUNTY. THIS AGREEMENT PROHIBITS FURTHER SUBDIVISION OF THE PARCEL, OUTLINES THE MAINTENANCE RESPONSIBILITIES OF ITS OWNER AND ENUMERATES THE USES PERMITTED ON THE PROPERTY.
- STORMWATER MANAGEMENT SHALL BE PROVIDED BY 3 EXTENDED DETENTION FACILITIES WITH MICRO-POOL NATURAL AREA CONSERVATION CREDIT, SHEETFLOW TO BUFFER CREDIT AND NON-ROOFTOP DISCONNECTION CREDIT. FACILITIES SHALL BE PRIVATELY OWNED AND MAINTAINED.
- THE FOREST CONSERVATION EASEMENTS HAVE BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION ACT. NO CLEARING, GRADING, OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT. HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.
- THE TOTAL FOREST OBLIGATION AMOUNT OF 10.8 ACRES HAS BEEN MET BY THE ON-SITE RETENTION OF 2.5 AC. WITHIN A FOREST CONSERVATION EASEMENT AND THE ON-SITE AFForestation OF 8.3 AC. WITHIN A FOREST CONSERVATION EASEMENT. AN ADDITIONAL 5.3 AC. OF AFForestation ABOVE THE REQUIREMENT SHALL BE USED FOR THE ESTABLISHMENT OF A PRIVATE AFForestation BANK WITH A DPW, DEVELOPER'S AGREEMENT WITH SURETY IN THE TOTAL AMOUNT OF \$317,988.00.
- ALL DRIVEWAY CULVERTS ARE TO BE 15" RCP.
- FOR FLAG OR PIPE STEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPE STEM AND ROAD RIGHT-OF-WAY LINE AND NOT ONTO THE FLAG OR PIPE STEM LOT DRIVEWAY.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
A) WIDTH - 12' (14' SERVING MORE THAN ONE RESIDENCE).
B) SURFACE - 6" OF COMPACT CRUSHER RUN BASE WITH TAR AND CHIP COATING.
C) GEOMETRY - MAX. 15% GRADE, MAX. 10% GRADE CHANGE & MIN. 45' TURNING RADIUS.
D) STRUCTURES/CULVERTS (OVER) - CAPABLE OF SUPPORTING 25 GROSS TONS (105 LBS LOAD).
E) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOODPLAIN WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY.
F) STRUCTURE CLEARANCES - MINIMUM 12 FEET.
G) MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE.
- LANDSCAPING FOR THIS SUBDIVISION IS PROVIDED IN ACCORDANCE WITH A CERTIFIED LANDSCAPE PLAN INCLUDED WITH THE ROAD CONSTRUCTION PLAN SET IN ACCORDANCE WITH SECTION 16.121 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL WITH A DPW, DEVELOPER'S AGREEMENT WITH SURETY IN THE AMOUNT OF \$49,950.00.
- A MINIMUM 20 FOOT SPACING IS TO BE PROVIDED BETWEEN STREET LIGHTS AND STREET TREES.

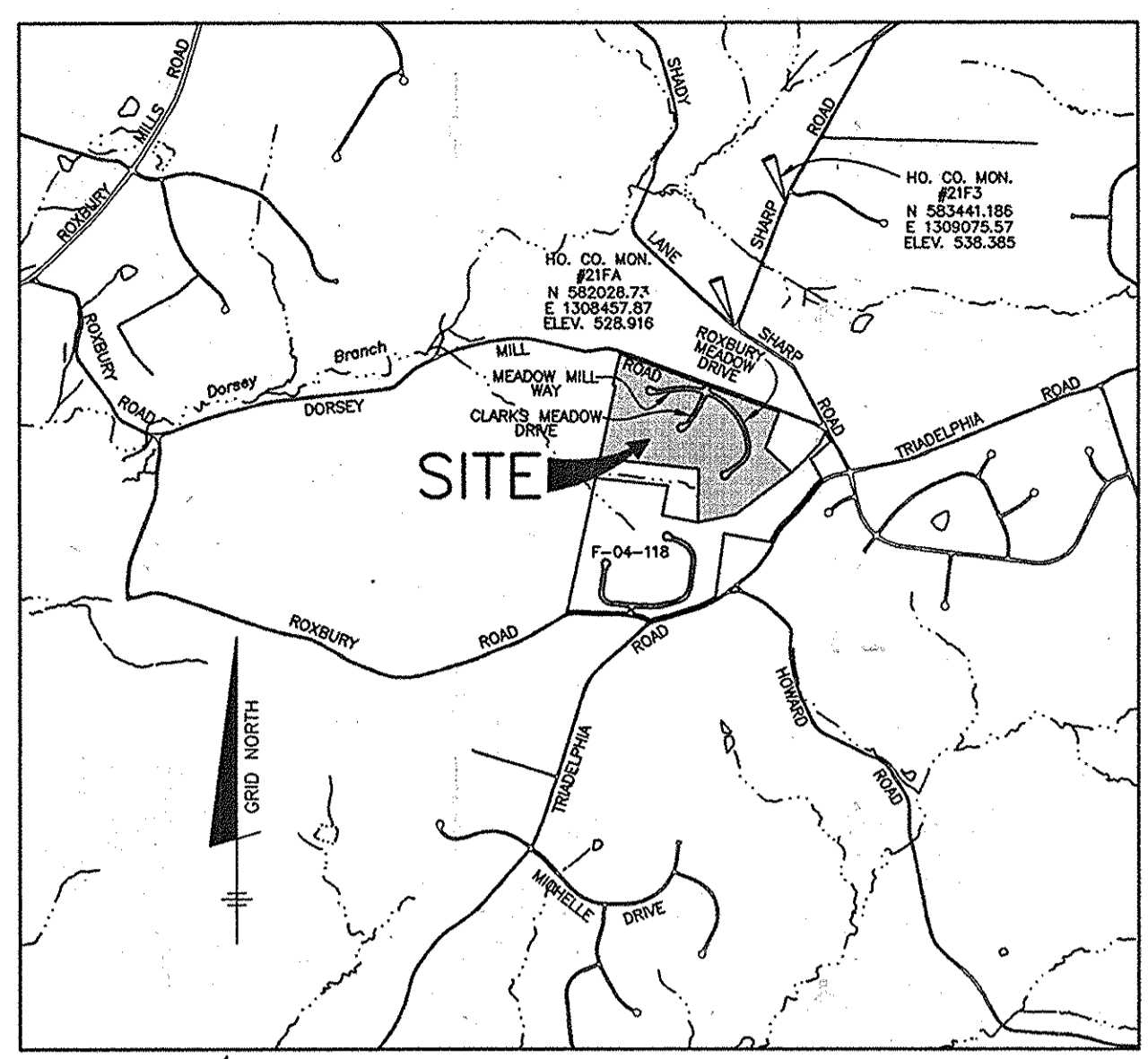


PLAN VIEW
SCALE: 1" = 200'

SHEET INDEX	
NO.	TITLE
1	TITLE SHEET
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3	ROAD PROFILES AND DETAILS
4	ROAD PROFILES AND DETAILS
5	GRADING, SEDIMENT AND EROSION CONTROL PLAN
6	GRADING, SEDIMENT AND EROSION CONTROL PLAN
7	GRADING, SEDIMENT AND EROSION CONTROL PLAN
8	SEDIMENT AND EROSION CONTROL NOTES AND DETAILS
9	STORM DRAIN DRAINAGE AREA MAP
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11	STORM DRAIN PROFILES
12	STORM DRAIN PROFILES AND SWM LANDSCAPING
13	LANDSCAPE PLAN
14	FOREST CONSERVATION PLAN AND FOREST MITIGATION BANK
15	FOREST CONSERVATION NOTES AND DETAILS
16	STORMWATER MANAGEMENT DETAILS FACILITY #1
17	STORMWATER MANAGEMENT DETAILS FACILITY #2
18	STORMWATER MANAGEMENT DETAILS FACILITY #3
19	SOIL BORING LOGS



AS BUILT 8/28/13
FISHER COLLINS & CARTER INC.



VICINITY MAP
SCALE: 1" = 2000'

SITE ANALYSIS DATA CHART

(DOES NOT INCLUDE AREA FOR CLARKS WOODS 2)

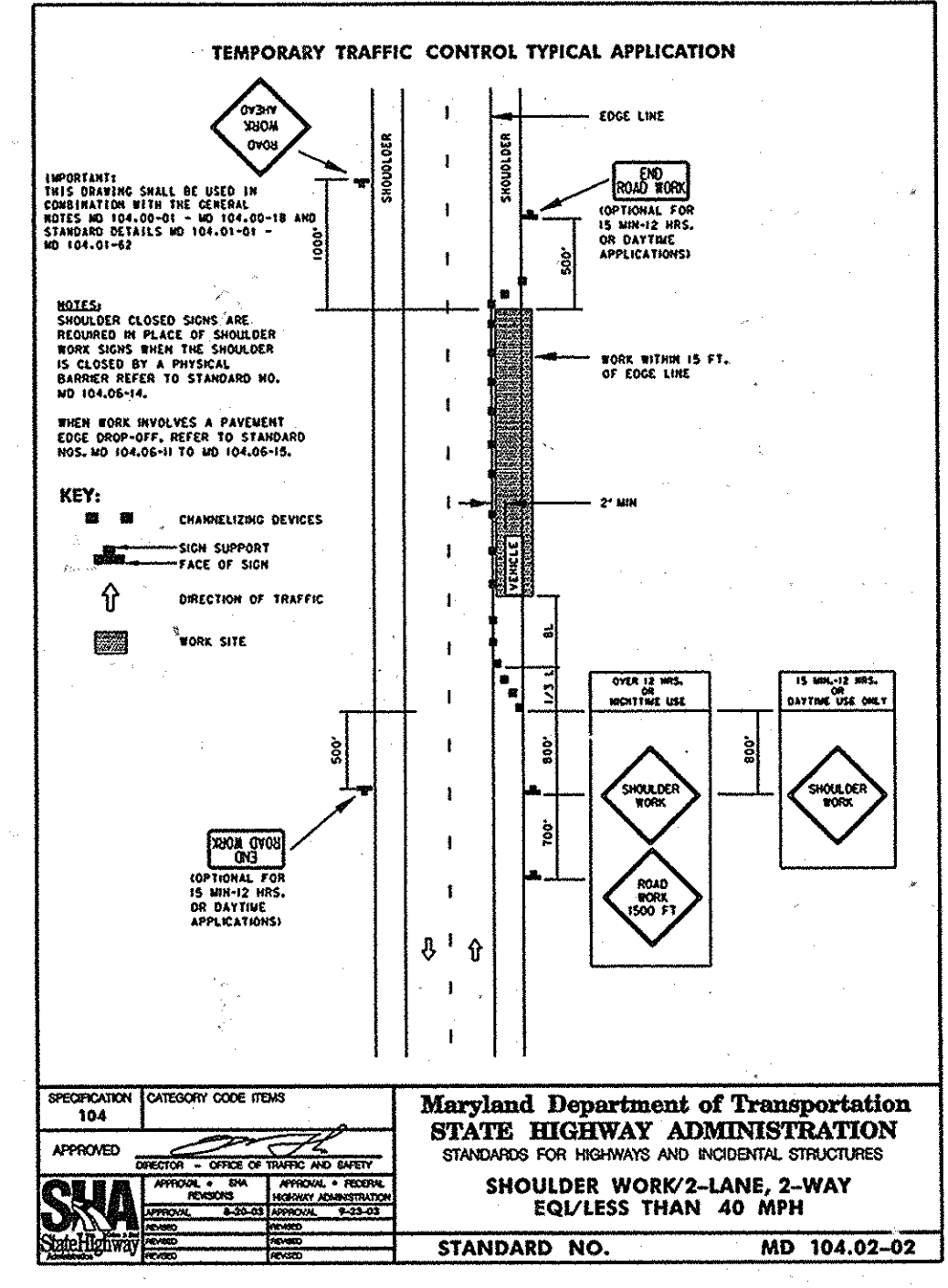
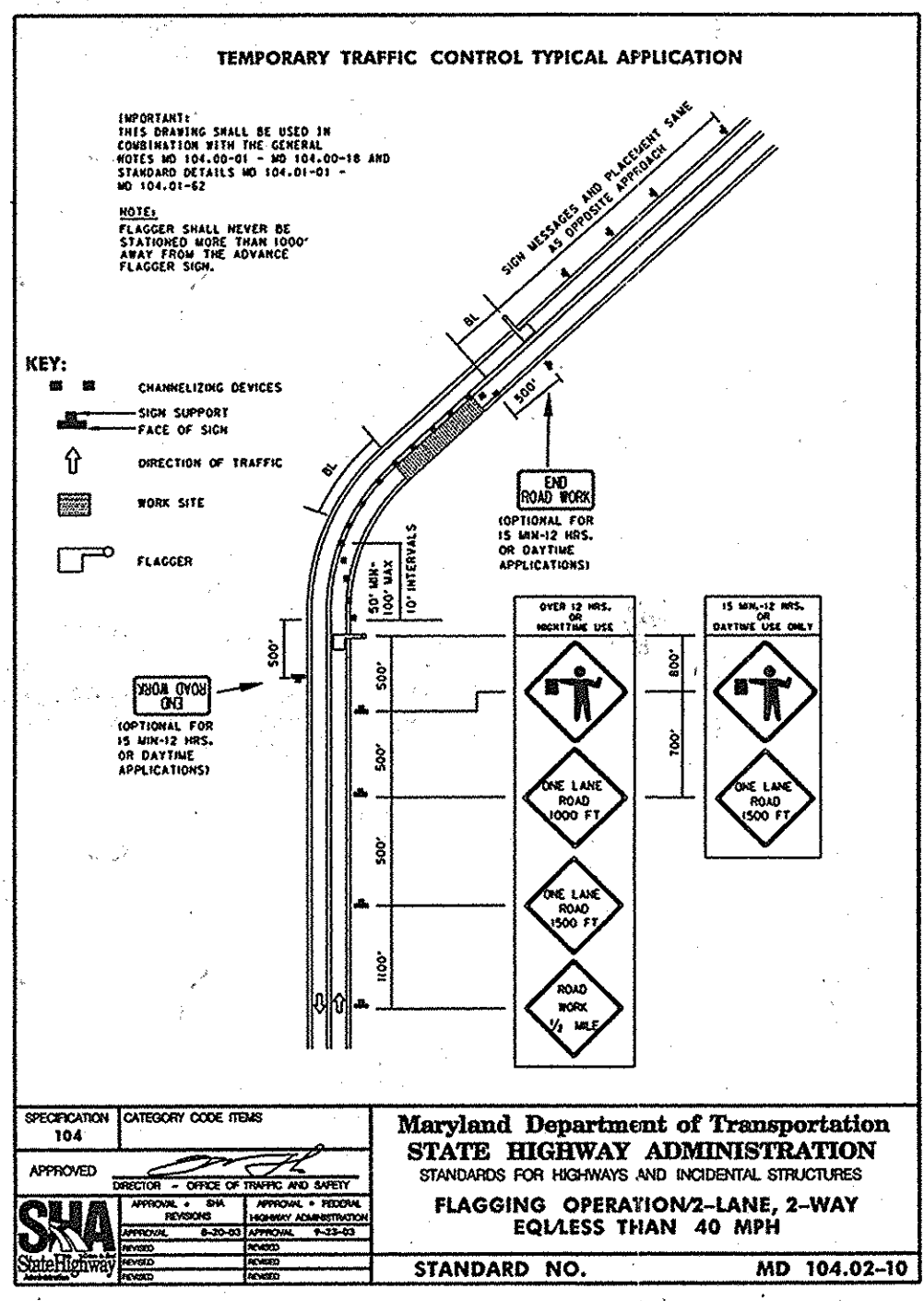
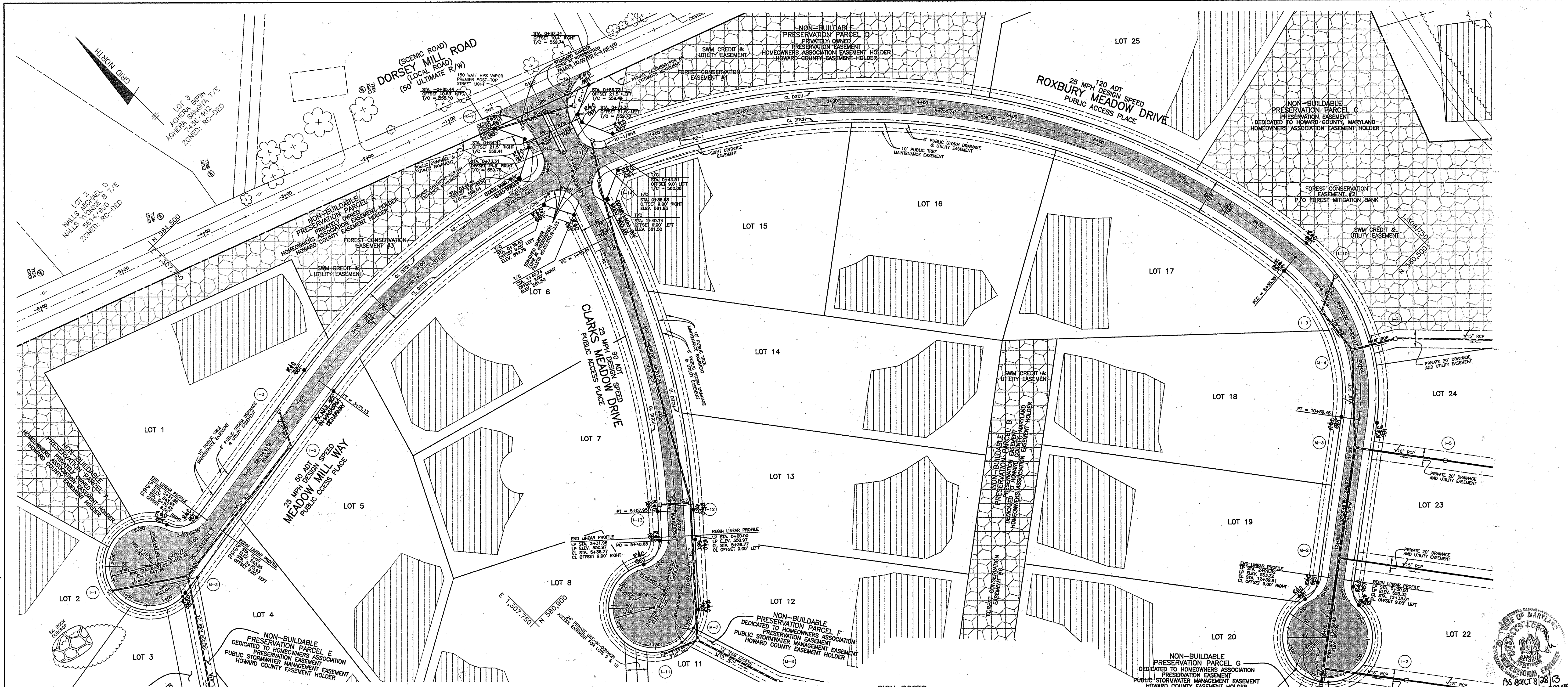
- GENERAL SITE DATA
- PRESENT ZONING: RC-DEO
 - APPLICABLE DPZ FILE REFERENCES: F-98-28, F-98-29, F-00-60, SP-03-14, RE-04-06, RE-05-01, RE-05-03R, F-04-159, F-05-24, F-05-775
 - PROPOSED USE OF SITE: RESIDENTIAL (SPD)
 - PROPOSED WATER AND SEWER SYSTEMS: PRIVATE
- AREA TABULATION
- GROSS TRACT AREA: 53.87±
 - AREA WITHIN 100-YEAR FLOODPLAIN: 0.00 AC±
 - TOTAL AREA OF 25% OR GREATER STEEP SLOPES: 0.00 AC±
 - AREA NOT IN FLOODPLAIN (FOR NTA CALC): 0.00 AC±
 - NET TRACT AREA: 53.87 AC±
 - TOTAL NUMBER OF LOTS ALLOWED PER ZONING: 12
 - 1 UNIT PER 4.25 GROSS ACRES: 26
 - 1 UNIT PER 2 NET ACRES (MAX): 26
 - TOTAL NUMBER OF RESIDENTIAL UNITS/LOTS PROPOSED ON THIS SUBDIVISION: 26
 - AREA OF CLUSTER LOTS: 28.45 AC±
 - AREA OF NON-BUILDABLE PRESERVATION PARCELS: 22.61 AC±
 - AREA OF BUILDABLE PRESERVATION PARCELS: N/A
 - AREA OF NON-BUILDABLE BULK PARCELS: N/A
 - AREA OF BUILDABLE BULK PARCELS: N/A
 - AREA OF ROAD RIGHT-OF-WAY: 2.81 AC±
 - OPEN SPACE ON-TOTAL SITE: N/A
 - AREA OF RECREATIONAL OPEN SPACE REQUIRED: N/A
- * 5% OF GROSS REQUIRED (2.69 AC±) OR NONE IF THE PRES. PARCEL IS DEDICATED TO THE HOA OR HOWARD COUNTY. PARCELS 'B' AND 'C' SHALL BE DEDICATED TO HOWARD COUNTY, MARYLAND

APPROVED: DEPARTMENT OF PUBLIC WORKS
William J. Mahoney 1-19-06
CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cinda Hammett 1/31/06
CHIEF, DIVISION OF LAND DEVELOPMENT

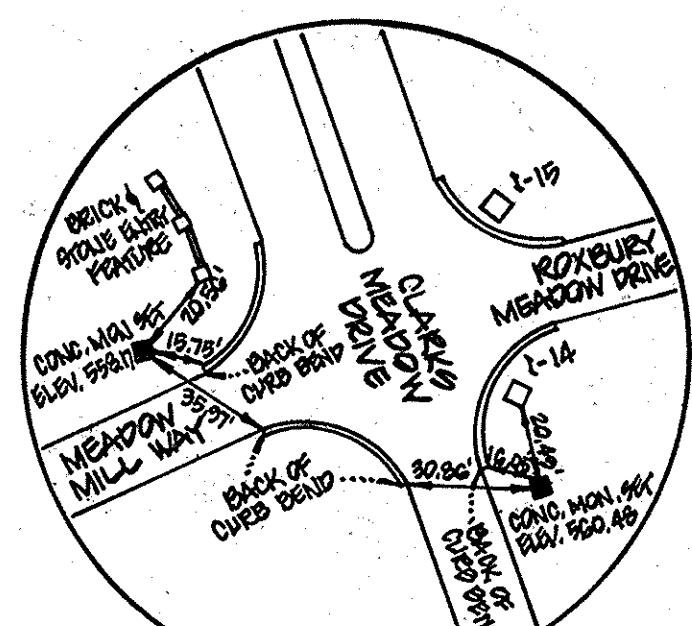
Michael J. ... 1/27/06
CHIEF, DEVELOPMENT ENGINEERING DIVISION

NO. DATE REVISION	
BENCHMARK ENGINEERS & LAND SURVEYORS & PLANNERS ENGINEERING, INC. 8480 BALTIMORE NATIONAL PIKE & SUITE 418 ELLICOTT CITY, MARYLAND 21043 phone: 410-465-6105 • fax: 410-465-6644 www.bel-civilengineering.com	
OWNER/DEVELOPER:	PROJECT:
DORSEY MILL, LLC C/O JAMES H. SELFRIDGE BUILDERS, INC. 14045 GARED DRIVE GLENWOOD, MARYLAND 21738	CLARKS MEADOW LOTS 1-26 NON-BUILDABLE PRESERVATION PARCELS 'A' THRU 'G' FOREST MITIGATION BANK A RESUBDIVISION OF CLARKS WOODS 1, LOT 4, PLAT NO. 14203
TITLE:	TITLE SHEET
DATE: JANUARY, 2006	PROJECT NO. 1736
DESIGN: DBT	DRAFT: DBT
CHECK: CAM	SCALE: 1" = 50'
	SHEET 1 OF 19



SIGN POSTS:

ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE POST (1 1/4 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE SLEEVE (12 GAUGE). 3' LONG, A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.



CENTERLINE CONTROL DATA

STREET NAME	STATION	NORTH	EAST
CLARKS MEADOW DRIVE	START=0+00.00	581328.28	1308173.75
	PC=1+90.61	581148.50	1308110.43
	PT=5+07.95	580877.60	1307949.16
	PC=5+40.64	580853.36	1307927.23
	END=6+00.39	580823.26	1307876.64
MEADOW MILL WAY	START=0+00.00	581228.37	1308138.56
	PT=3+71.13	581261.92	1307772.73
	PC=5+75.71	581230.19	1307570.62
	PT=6+47.48	581243.55	1307501.58
	END=6+57.02	581248.43	1307493.37
ROXBURY MEADOW COURT	START=0+00.00	581228.37	1308138.56
	PCC=8+55.38	580589.82	1308636.67
	END=13+06.42	580411.25	1308557.49

CENTER LINE CURVE DATA

STREET NAME	STATION	RADIUS	ARC	DELTA	TANGENT	CHORD
CLARKS MEADOW DRIVE	1+90.61 TO 5+07.95	800.00'	317.34'	22°43'40"	160.78'	S30°45'59"W 315.26'
	5+40.64 TO 6+00.39	100.00'	59.74'	34°13'50"	30.79'	S59°14'44"W 58.86'
MEADOW MILL WAY	0+00.00 TO 3+71.13	750.74'	371.13'	28°19'28"	189.44'	N84°45'36"W 367.38'
	5+75.71 TO 6+47.48	103.48'	71.77'	39°44'10"	37.40'	N79°03'15"E 70.34'
ROXBURY MEADOW COURT	0+00.00 TO 8+55.38	750.74'	855.38'	65°16'55"	480.87'	S37°57'24"E 809.85'
	8+55.38 TO 10+59.45	204.07'	200.00'	58°27'42"	111.92'	S23°54'55"W 195.33'

APPROVED: DEPARTMENT OF PUBLIC WORKS
William J. White 1-19-06
 CHIEF, BUREAU OF HIGHWAYS
 APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cindy Harris 1/11/06
 CHIEF, DIVISION OF LAND DEVELOPMENT
William J. White 1/22/06
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

NO. DATE REVISION

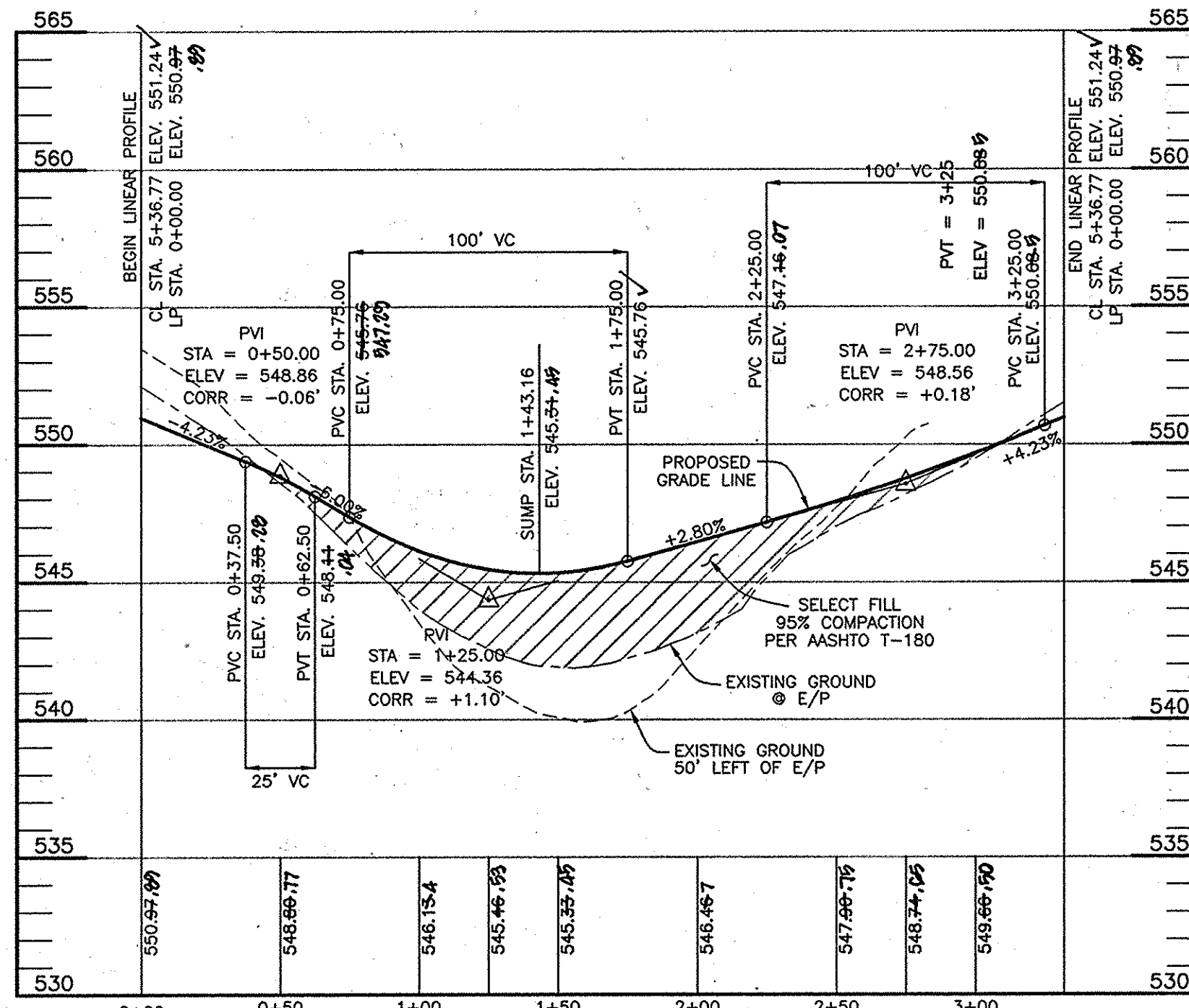
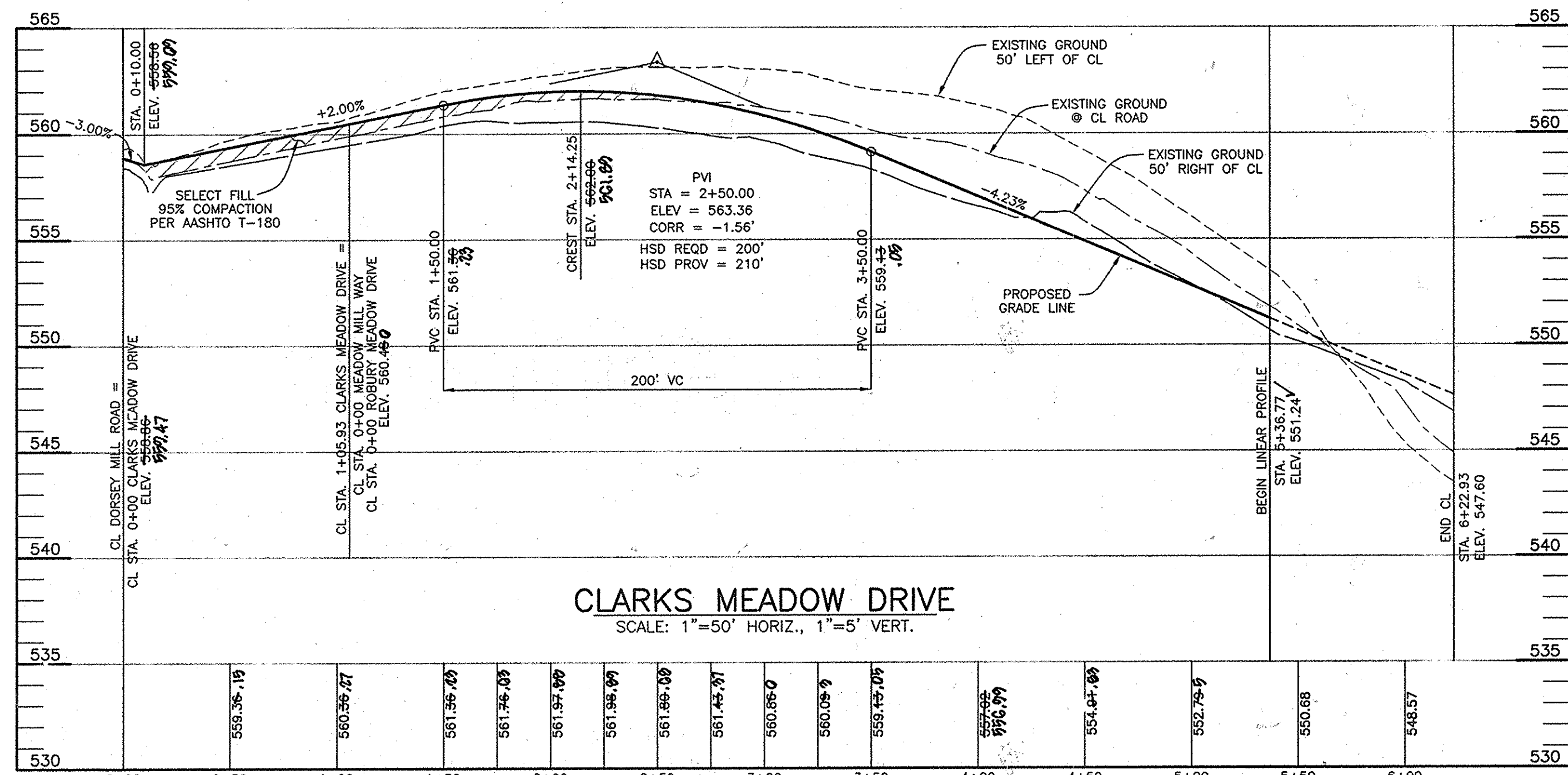
BENCHMARK ENGINEERING, INC.
 ENGINEERS • LAND SURVEYORS • PLANNERS
 8480 BALTIMORE NATIONAL PIKE & SUITE 418
 ELLICOTT CITY, MARYLAND 21043
 phone: 410-465-6105 • fax: 410-465-6844
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OWNER/DEVELOPER: DORSEY MILL, LLC
 C/O JAMES H. SELFRIDGE BUILDERS, INC.
 14045 GARED DRIVE
 GLENWOOD, MARYLAND 21738

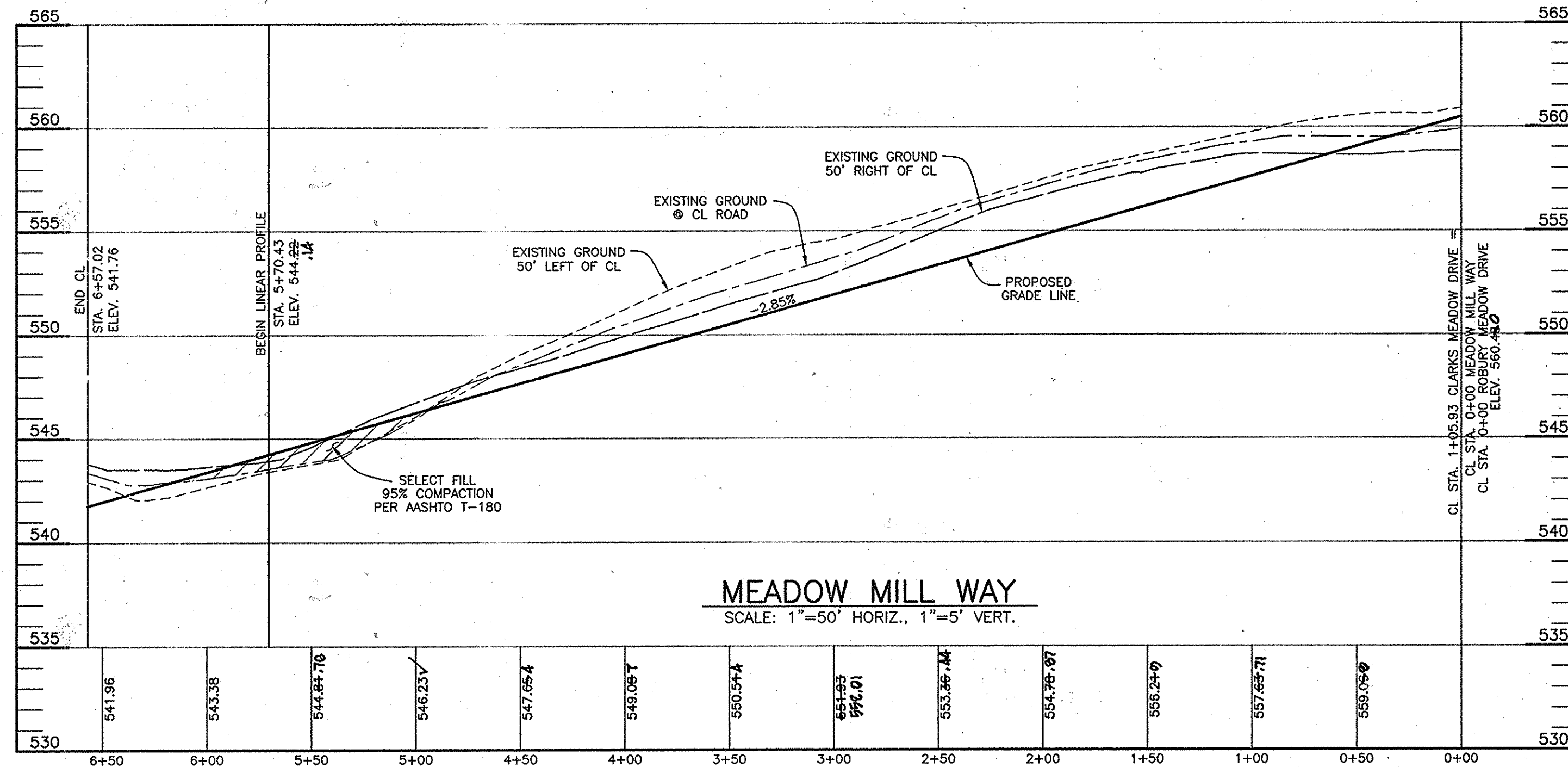
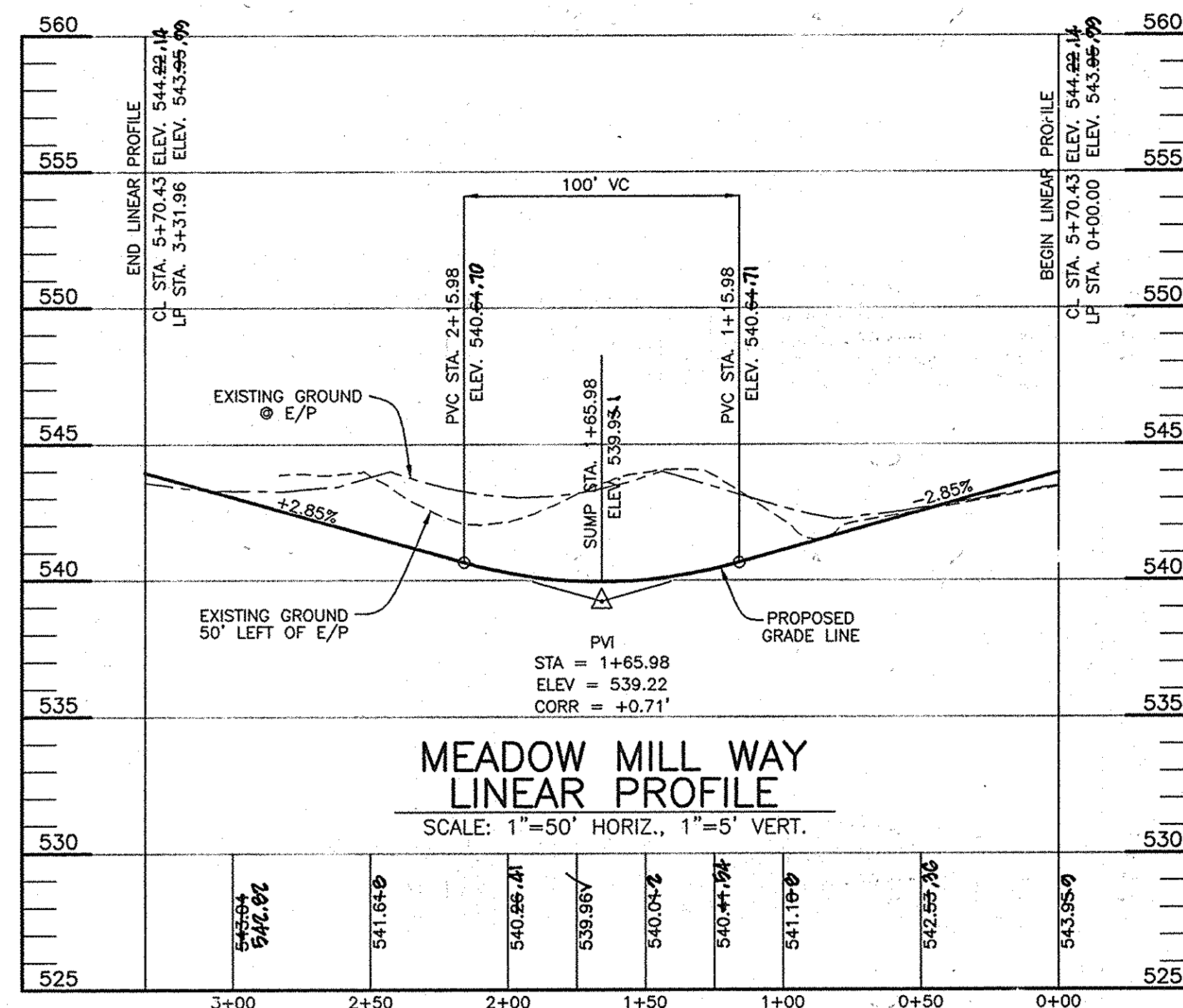
PROJECT: CLARKS MEADOW LOTS 1-26
 NON-BUILDABLE PRESERVATION PARCELS 'A' THRU 'G'
 FOREST MITIGATION BANK
 A RESUBDIVISION OF CLARKS WOODS I, LOT 4, PLAT NO. 14203
 LOCATION: TAX MAP: 21 PARCEL: 227
 GRID: 17 ZONED: RC-DEO
 ELECTION DISTRICT NO. 4
 HOWARD COUNTY, MARYLAND

TITLE: ROAD PLAN

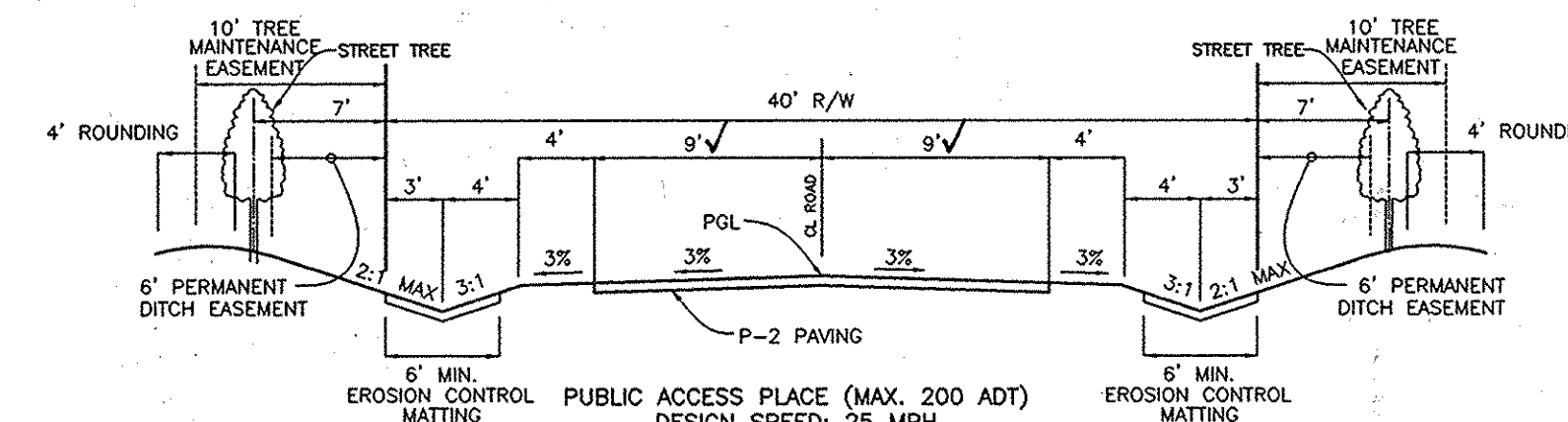
DATE: JANUARY, 2006 PROJECT NO. 1736
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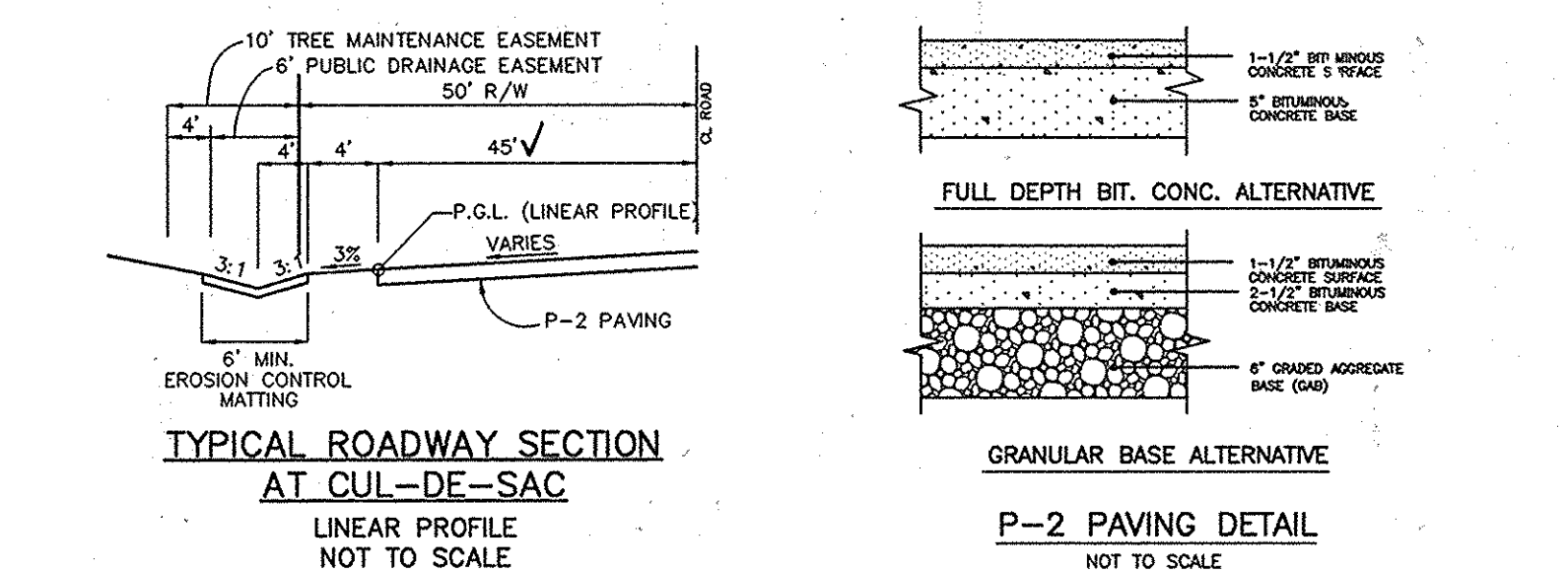
CLARKS MEADOW DRIVE
LINEAR PROFILE
SCALE: 1"=50' HORIZ., 1"=5' VERT.



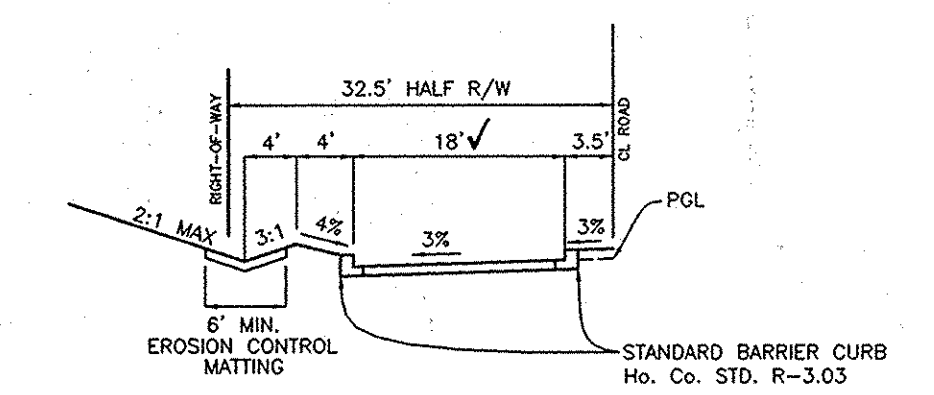
MEADOW MILL WAY
LINEAR PROFILE
SCALE: 1"=50' HORIZ., 1"=5' VERT.



TYPICAL ROADWAY SECTION
CLARKS MEADOW DRIVE
MEADOW MILL WAY
SCALE: NOT TO SCALE

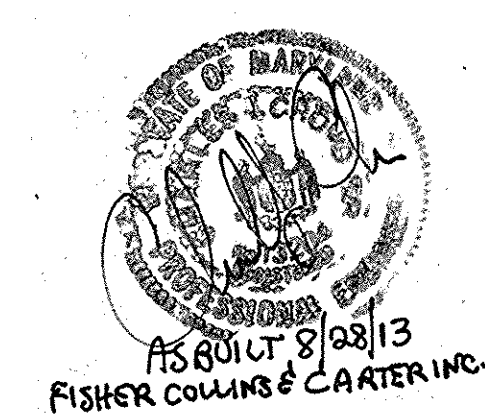


TYPICAL ROADWAY SECTION
AT CUL-DE-SAC
LINEAR PROFILE
NOT TO SCALE



TYPICAL 1/2 ROADWAY SECTION
CLARKS MEADOW DRIVE
SCALE: NOT TO SCALE
STA. 0+56.73 TO STA. 0+73.31

APPROVED: DEPARTMENT OF PUBLIC WORKS
William F. Mahaffey 1-19-06
 CHIEF, BUREAU OF HIGHWAYS
 APPROVED: DEPARTMENT OF PLANNING AND ZONING
David Harris 1/21/06
 CHIEF, DIVISION OF LAND DEVELOPMENT
John Dammann 1/21/06
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

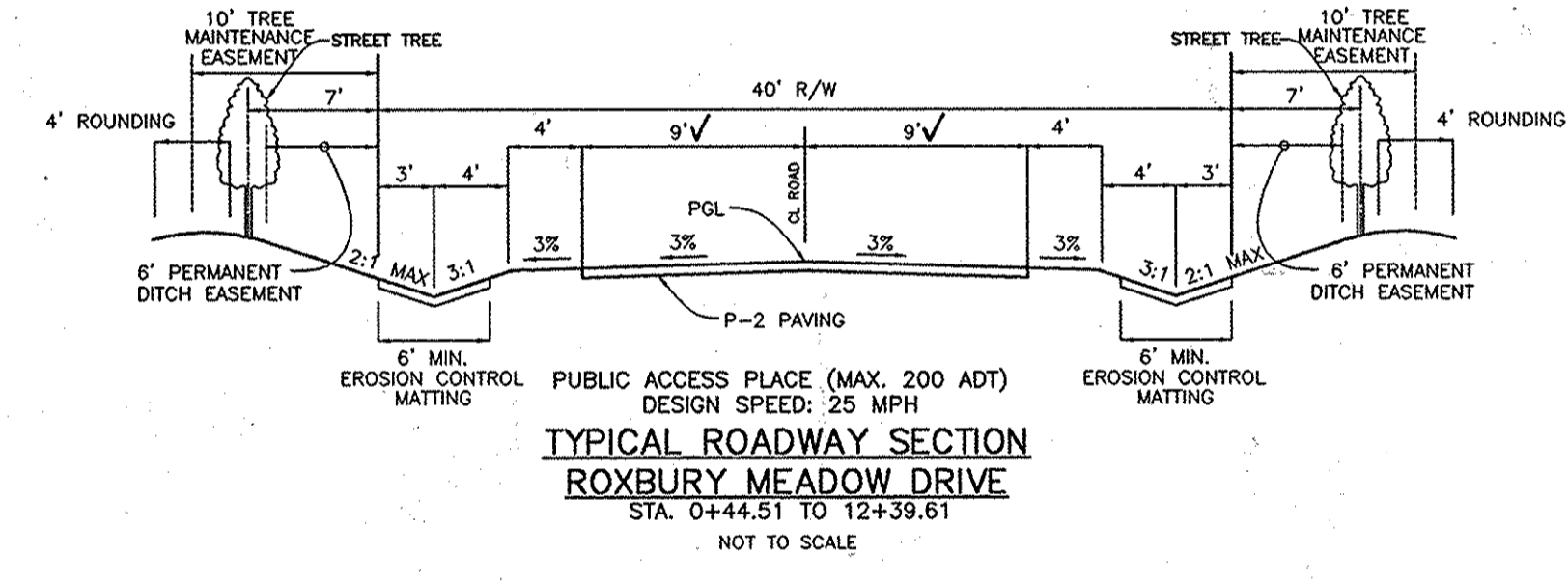
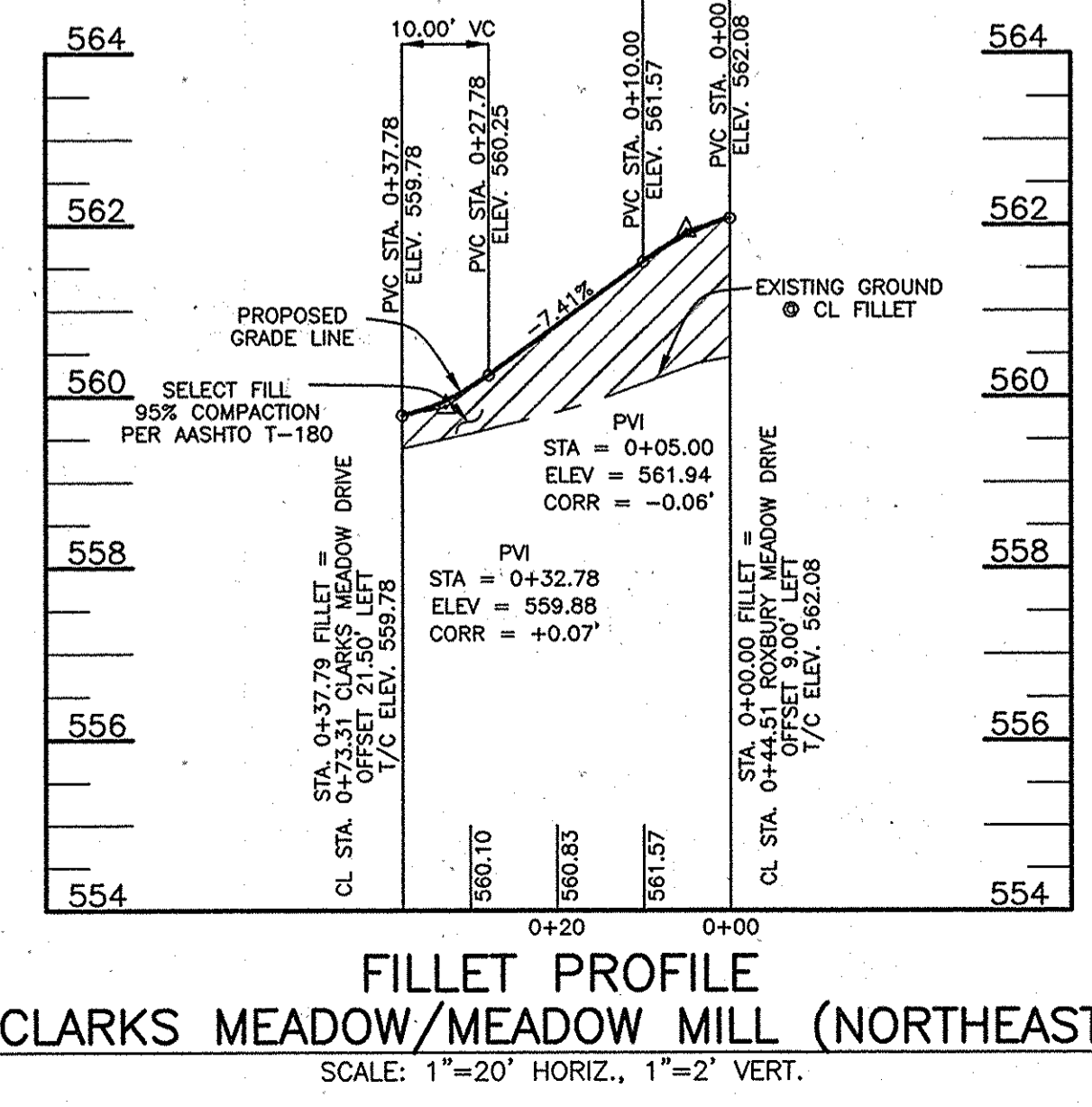
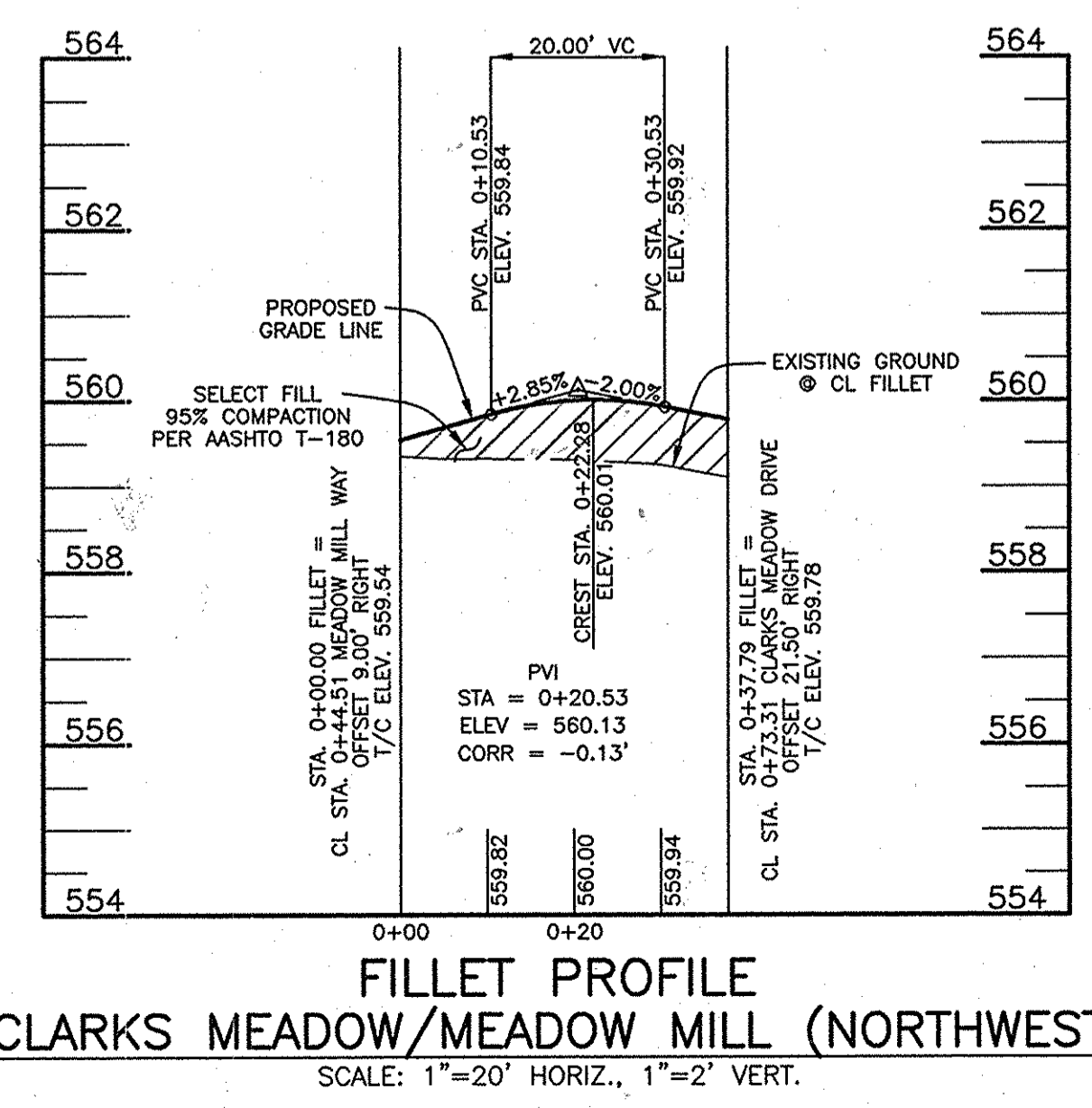
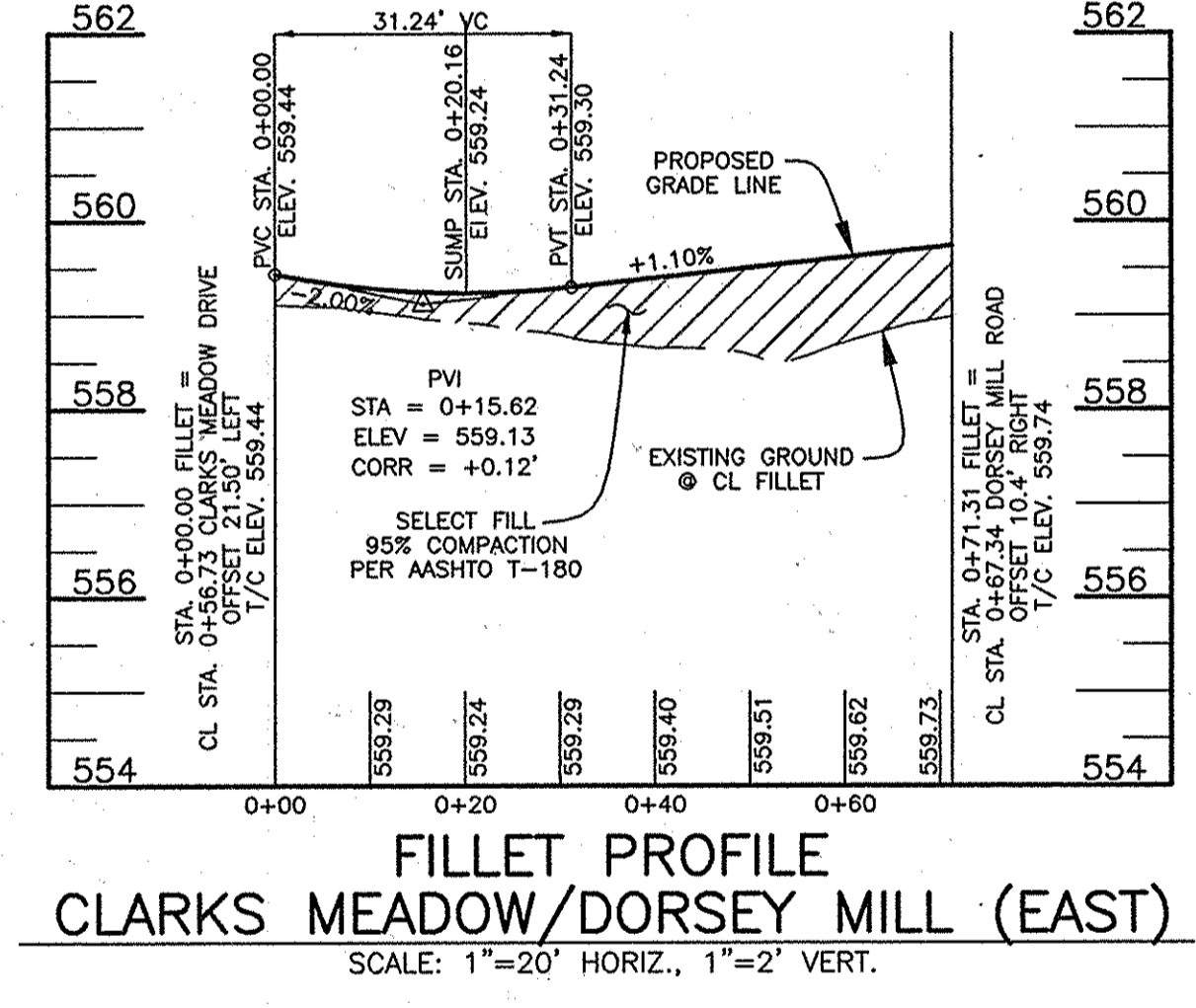
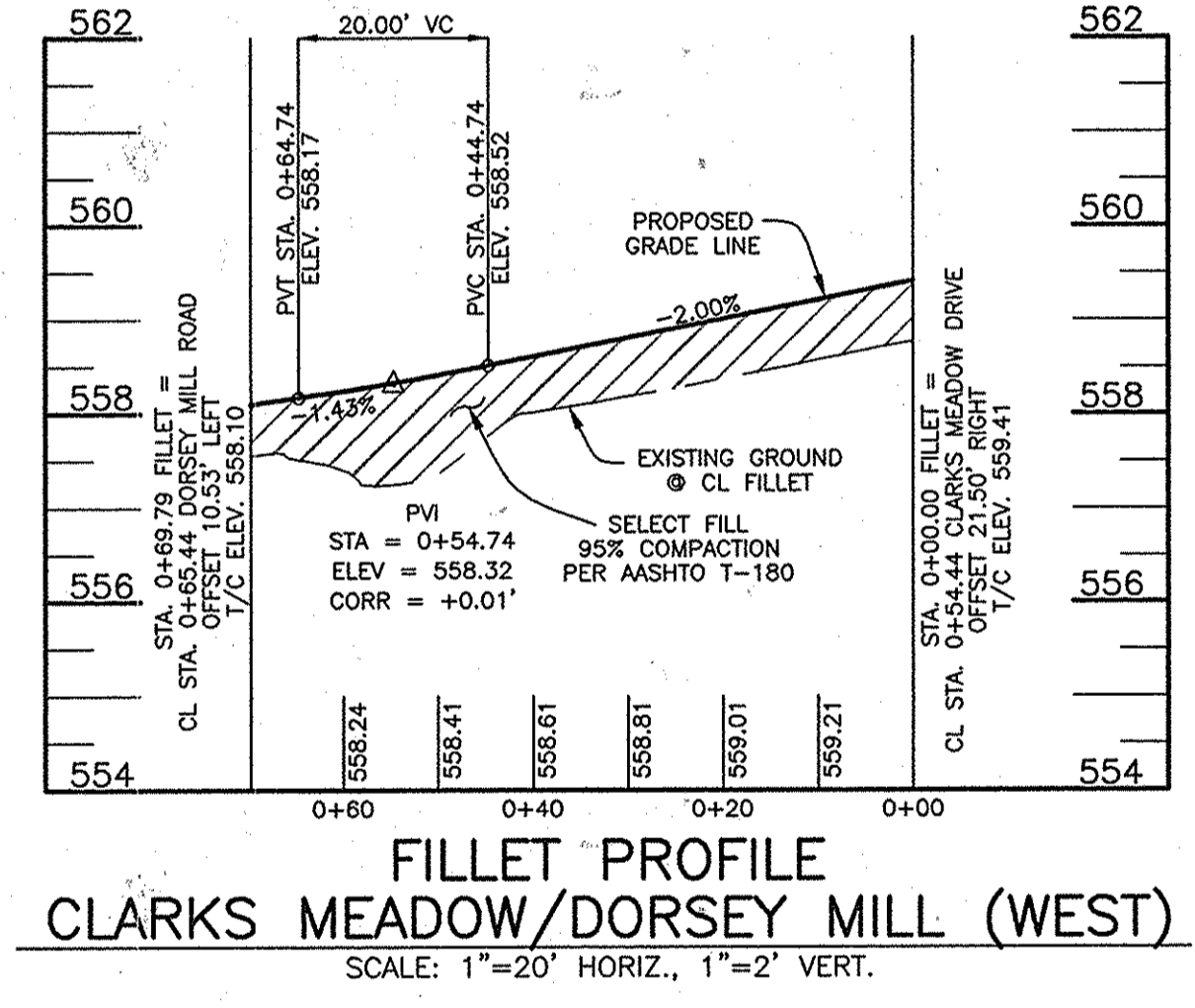
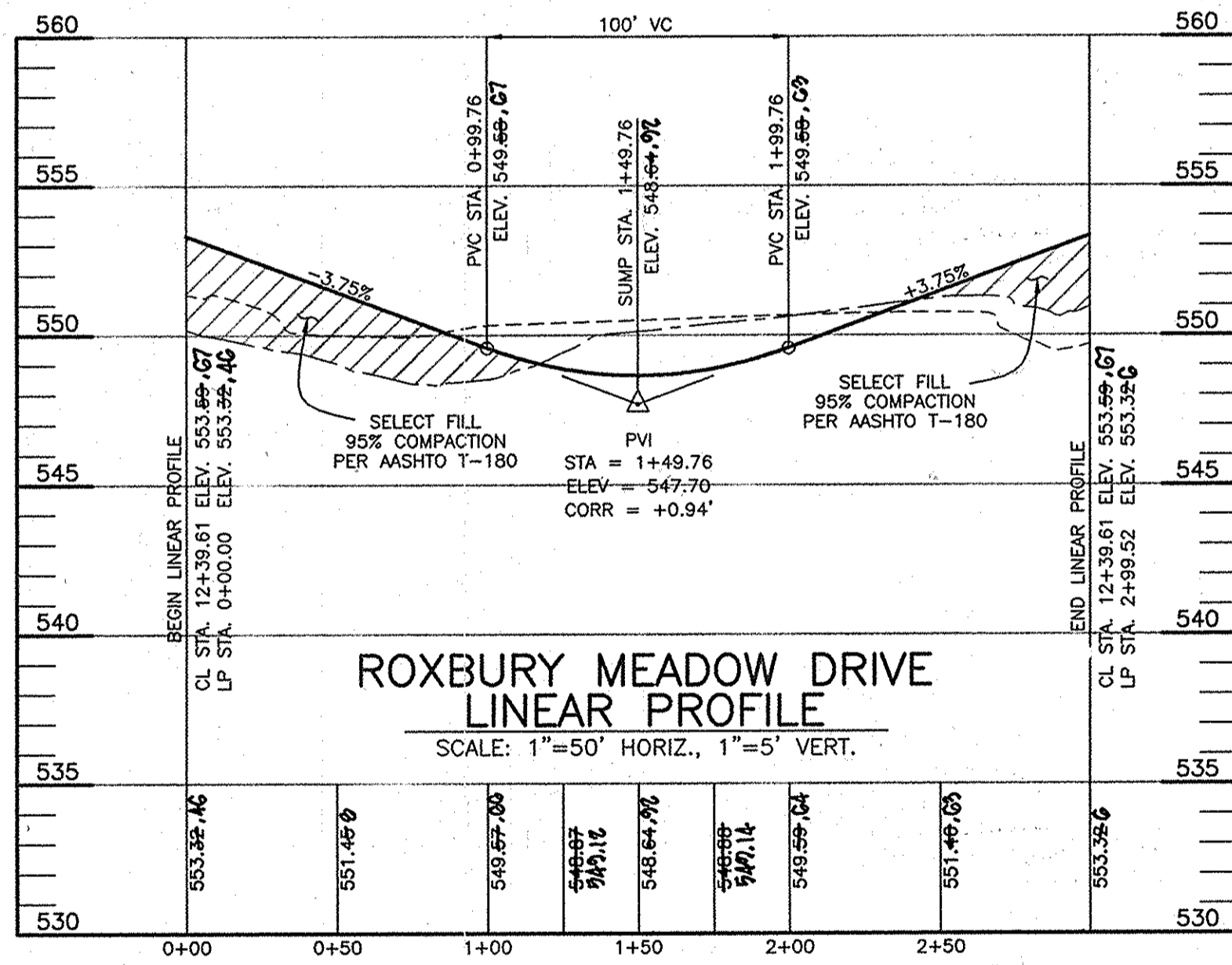
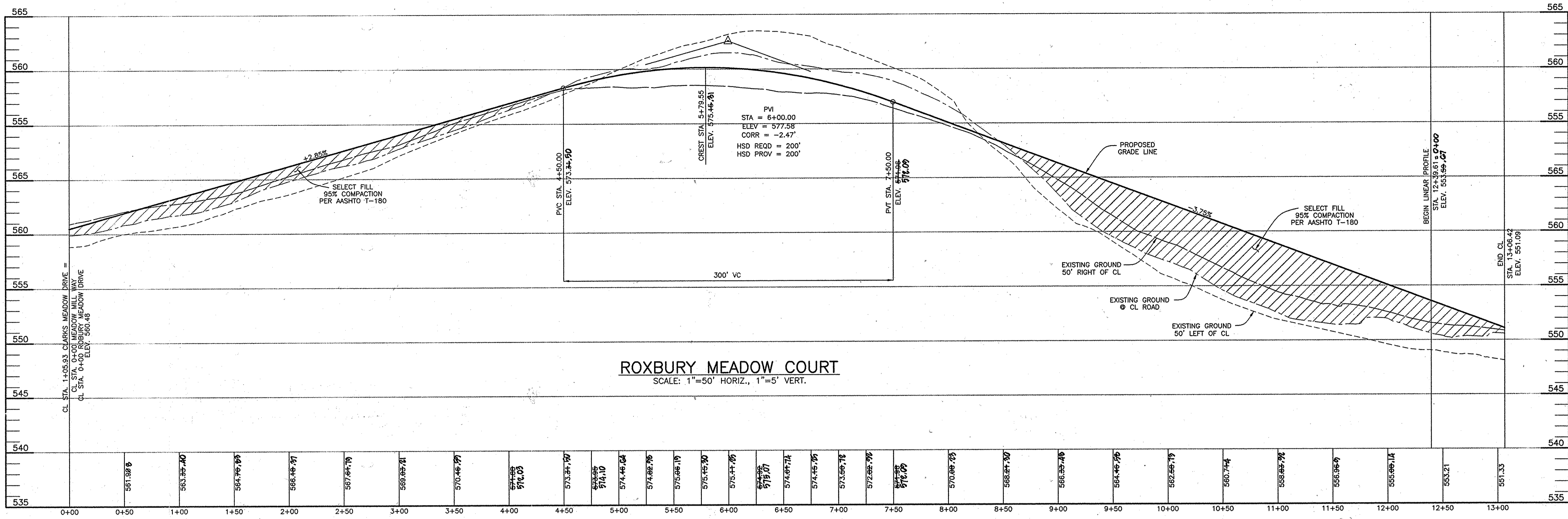


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Donald Maer
12/23/05

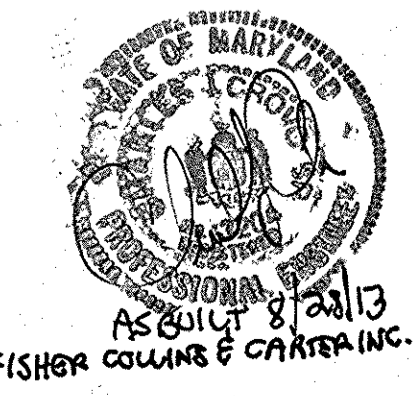
OWNER/DEVELOPER: DORSEY MILL, LLC C/O JAMES H. SELFRIDGE BUILDERS, INC. 14045 GARED DRIVE GLENWOOD, MARYLAND 21738	PROJECT: CLARKS MEADOW LOTS 1-26 NON-BUILDABLE PRESERVATION PARCELS 'A' THRU 'G' FOREST MITIGATION BANK A RESUBDIVISION OF CLARKS WOODS I, LOT 4, PLAT NO. 14203
LOCATION: 14045 GARED DRIVE GLENWOOD, MARYLAND	TAX MAP: 21 GRID: 17 ELECTION DISTRICT NO. 4 HOWARD COUNTY, MARYLAND
TITLE: ROAD PROFILES	
DATE: JANUARY, 2006	PROJECT NO. 1736
DESIGN: DBT	DRAFT: DBT
CHECK: CAM	SCALE: 1" = 50'
SHEET 3 OF 19	



APPROVED: DEPARTMENT OF PUBLIC WORKS
William J. ... 1-19-06
 CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cindy ... 1/19/06
 CHIEF, DIVISION OF LAND DEVELOPMENT

... 1/19/06
 CHIEF, DEVELOPMENT ENGINEERING DIVISION



NO.	DATE	REVISION

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Orville Maor
12/23/05

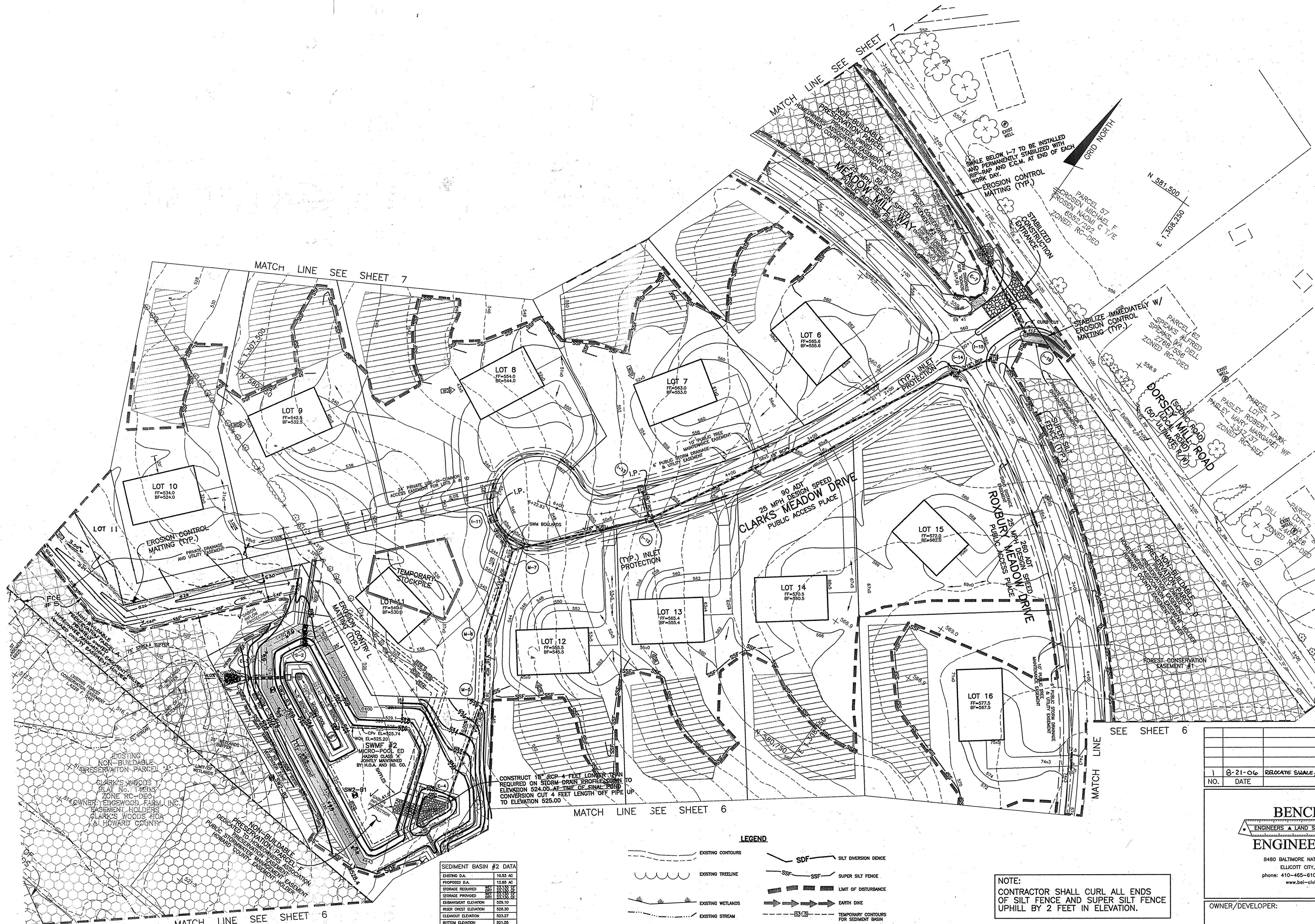
OWNER/DEVELOPER: DORSEY MILL, LLC
 C/O JAMES H. SELFRIDGE BUILDERS, INC.
 14045 GARED DRIVE
 GLENWOOD, MARYLAND 21738

PROJECT: CLARKS MEADOW
 LOTS 1-26
 NON-BUILDABLE PRESERVATION PARCELS 'A' THRU 'G'
 FOREST MITIGATION BANK
 A RESUBDIVISION OF CLARKS WOODS I, LOT 4, PLAT NO. 14203

LOCATION: TAX MAP: 21 PARCEL: 227
 GRID: 17 ZONED: RC-DEO
 ELECTION DISTRICT NO. 4
 HOWARD COUNTY, MARYLAND

TITLE: ROAD PROFILES

DATE: JANUARY, 2006 PROJECT NO. 1736
 DESIGN: DBT DRAFT: DBT CHECK: CAM SCALE: 1" = 50' SHEET 4 OF 19



AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

PE NO. 13204
DATE 2/23/06

CERTIFY MEANS TO STATE OR DECLARE A PROFESSIONAL OPINION BASED UPON ON-SITE INSPECTIONS AND MATERIAL TESTS WHICH ARE CONDUCTED DURING CONSTRUCTION. THE ON-SITE INSPECTIONS AND MATERIAL TESTS ARE THOSE INSPECTIONS AND TESTS DEEMED SUFFICIENT AND APPROPRIATE BY COMMONLY ACCEPTED ENGINEERING STANDARDS. CERTIFY DOES NOT MEAN OR IMPLY A GUARANTEE BY THE ENGINEER NOR DOES AN ENGINEER'S CERTIFICATION RELIEVE ANY OTHER PARTY FROM MEETING REQUIREMENTS IMPOSED BY CONTRACT, EMPLOYMENT OR OTHER MEANS, INCLUDING MEETING COMMONLY ACCEPTED INDUSTRY PRACTICES.

BY THE DEVELOPER:
I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE, AND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Donna H. Sullivan 1/4/06
DEVELOPER

BY THE ENGINEER:
I/WE CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

Donald Maon 12/23/05
ENGINEER - DONALD A. MAON, P.E. # 21443

These plans have been reviewed for the HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL.

Jim Ryan 1/4/06
USDA - NATURAL RESOURCES CONSERVATION SERVICE

These plans for small pond construction, soil erosion, and sediment control meet the requirements of the HOWARD SOIL CONSERVATION DISTRICT.

Howard Soil Conservation District 1/1/06
DATE

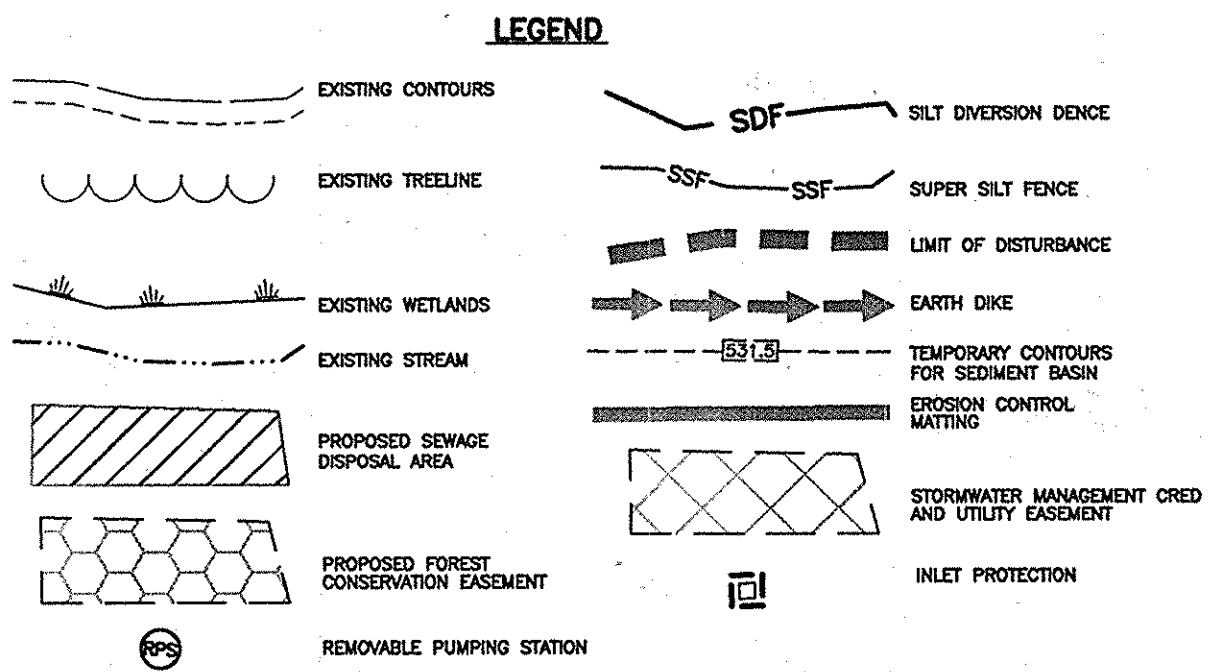
APPROVED: DEPARTMENT OF PUBLIC WORKS
William A. ... 1-19-06
CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cecilia ... 1/31/06
CHIEF, DIVISION OF LAND DEVELOPMENT

John ... 1/27/06
CHIEF, DEVELOPMENT ENGINEERING DIVISION

SEDIMENT BASIN #2 DATA

EXISTING D.A.	10.53 AC
PROPOSED D.A.	12.85 AC
STORAGE REQUIRED	133,333 cu ft
STORAGE PROVIDED	133,333 cu ft
DISBURGMENT ELEVATION	526.10
PIER CRIST ELEVATION	526.30
CLEAROUT ELEVATION	523.27
BOTTOM ELEVATION	521.58
WEY STORAGE ELEVATION	523.94
DIV STORAGE ELEVATION	524.93
Q1 DURING DEVELOPMENT	0.54 cfs
Q1 DURING DEVELOPMENT	0.36 cfs



NOTE:
CONTRACTOR SHALL CURL ALL ENDS OF SILT FENCE AND SUPER SILT FENCE UPHILL BY 2 FEET IN FENCE.

NOTE:
EROSION CONTROL MATTING TO BE PLACED IN ALL ROADSIDE DITCHES.

NOTE:
CONSTRUCTION OF HOME ON LOT 11 TO BE DELAYED UNTIL ALL UPLAND CONTRIBUTING AREAS HAVE BEEN PERMANENTLY STABILIZED AND APPROVED BY SEDIMENT INSPECTOR.

NO.	DATE	REVISION
1	8-21-06	RELOCATE SWALE / PRIVATE DRAINAGE SWY OFF FLAGSTEM OF LOT 11

BENCHMARK ENGINEERING, INC.
ENGINEERS • LAND SURVEYORS • PLANNERS

8480 BALTIMORE NATIONAL PIKE • SUITE 418
ELLCOTT CITY, MARYLAND 21043
PHONE: 410-465-6105 • FAX: 410-465-6544
WWW.BEI-CIVILENGINEERING.COM

Donna H. Sullivan 12/23/05

OWNER/DEVELOPER: DORSEY MILL, LLC
C/O JAMES H. SELFRIDGE BUILDERS, INC.
14045 GAY'D DRIVE
GLENWOOD, MAR 'AND 21738

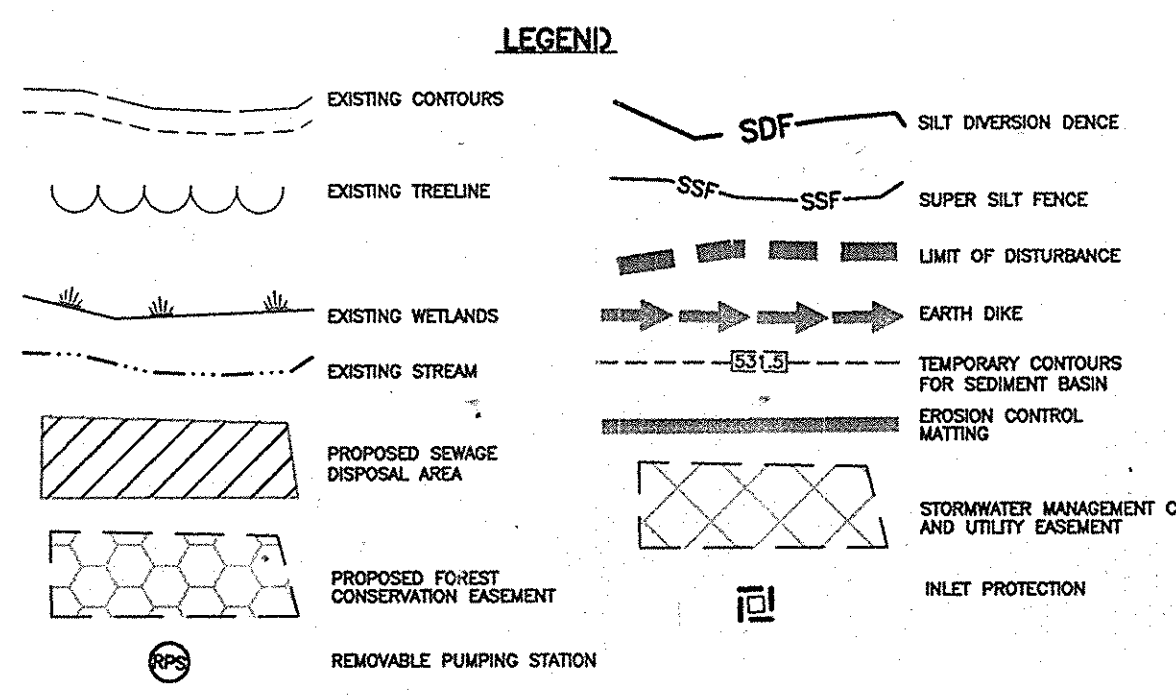
PROJECT: CLARKS MEADOW
LOTS 1-26
NON-BUILDABLE PRESERVATION PARCELS 'A' THRU 'G'
FOREST MITIGATION BANK
A RESUBDIVISION OF CLARKS WOODS I, LOT 4, PLAT NO. 14203

LOCATION: TAX MAP: 21 PARCEL: 227
GRID: 17 ZONED: RC-DEO
ELECTION DISTRICT NO. 4
HOWARD COUNTY, MARYLAND

TITLE: GRADING, SEDIMENT AND EROSION CONTROL PLAN

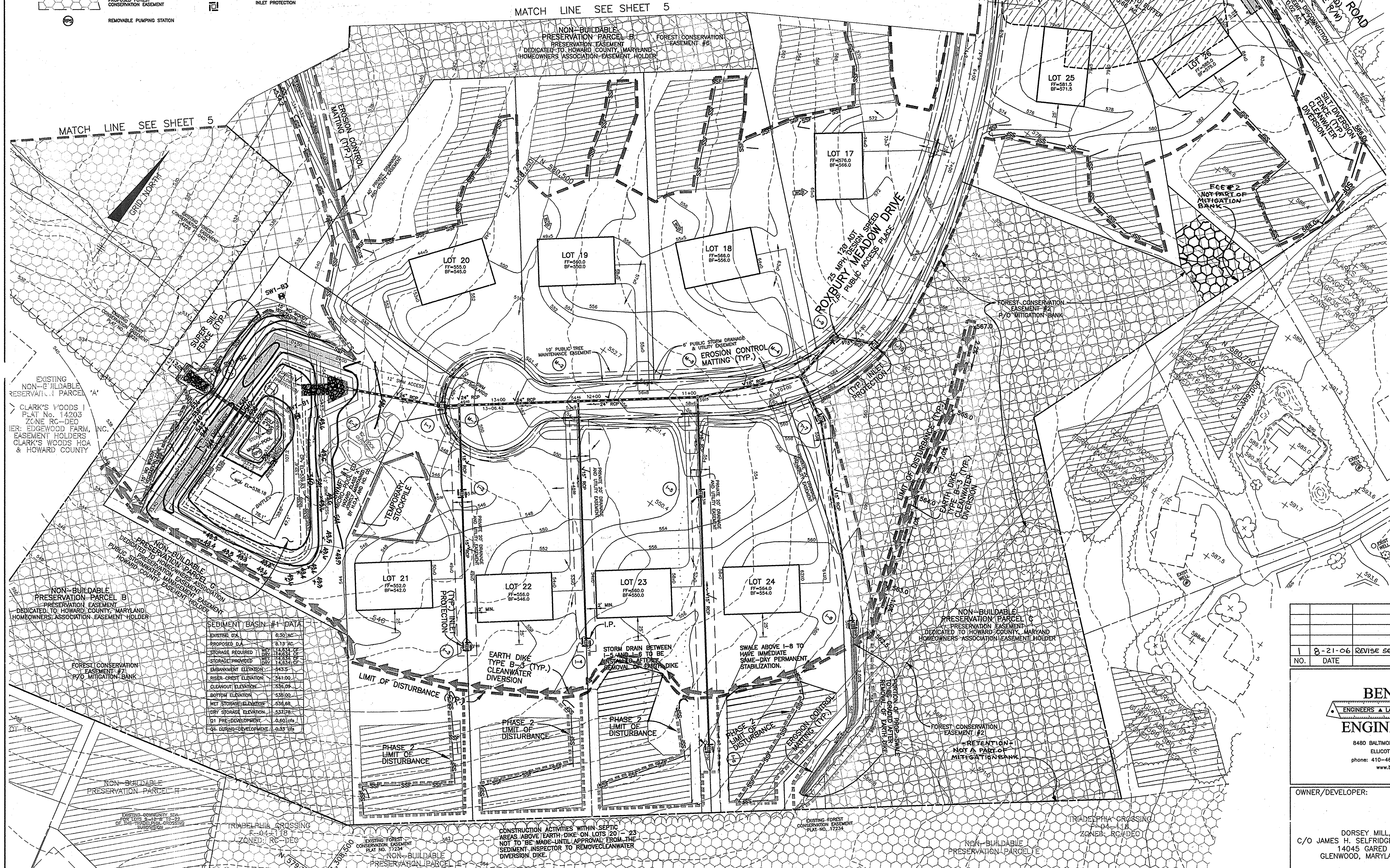
DATE: JANUARY, 2006 **PROJECT NO.:** 1736
SCALE: 1" = 50' **SHEET** 5 **OF** 19

DESIGN: DBT DRAFT: DBT CHECK: CAM



NOTE:
CONTRACTOR SHALL CURL ALL ENDS OF SILT FENCE AND SUPER SILT FENCE UPHILL BY 2 FEET IN ELEVATION.

NOTE:
EROSION CONTROL MATTING TO BE PLACED IN ALL ROADSIDE DITCHES.



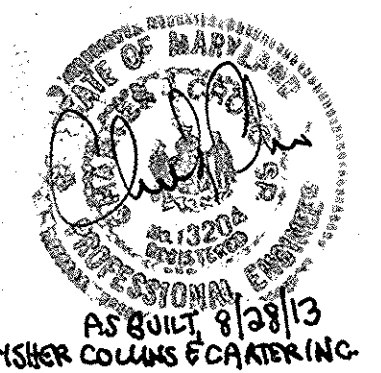
EXISTING NON-BUILDABLE RESERVATION PARCEL 'A'
CLARK'S WOODS I
ZONE RC-DEO
HER. EDGEWOOD FARM, INC.
EASEMENT HOLDERS
CLARK'S WOODS HOA
& HOWARD COUNTY

SEDIMENT BASIN #1 DATA

EXISTING D.A.	6.50 AC
PROPOSED D.A.	8.13 AC
STORAGE REQUIRED (1)	12,833 CF
STORAGE REQUIRED (2)	12,833 CF
EMBANKMENT ELEVATION	443.5
RISER CREST ELEVATION	541.00
CLEANOUT ELEVATION	536.09
BOTTOM ELEVATION	535.00
WET STORAGE ELEVATION	536.68
DRY STORAGE ELEVATION	532.78
DT PRE-DEVELOPMENT	-0.60/278
DT DURING DEVELOPMENT	-0.33/278

NOTE:
CONSTRUCTION OF HOME ON LOT 21 TO BE DELAYED UNTIL APPROVAL FROM SEDIMENT CONTROL INSPECTOR.

CONSTRUCTION ACTIVITIES WITHIN SEPTIC AREAS ABOVE EARTH DIKE ON LOTS 20-23 NOT TO BE MADE UNTIL APPROVAL FROM THE SEDIMENT INSPECTOR TO REMOVE CLEAN WATER DIVERSION DIKE.



AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

PE NO. 13204
DATE 8/22/13

CERTIFY MEANS TO STATE OR DECLARE A PROFESSIONAL OPINION BASED UPON ON-SITE INSPECTIONS AND MATERIAL TESTS WHICH ARE CONDUCTED DURING CONSTRUCTION. THE ON-SITE INSPECTIONS AND MATERIAL TESTS ARE THOSE INSPECTIONS AND TESTS DEEMED NECESSARY AND APPROPRIATE BY COMMONLY ACCEPTED ENGINEERING STANDARDS. CERTIFY DOES NOT MEAN OR IMPLY A GUARANTEE BY THE ENGINEER NOR DOES AN ENGINEER'S CERTIFICATION RELIEVE ANY OTHER PARTY FROM MEETING REQUIREMENTS IMPOSED BY CONTRACT, EMPLOYMENT, OR OTHER MEANS, INCLUDING MEETING COMMONLY ACCEPTED INDUSTRY PRACTICES.

BY THE DEVELOPER:
I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

DEVELOPER: *James H. Selfridge* 1/4/06 DATE

BY THE ENGINEER:
I/WE CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

ENGINEER: *Donald A. Mason* 12/23/05 DATE
DONALD A. MASON, P.E. # 21443

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL.

Jim Hays 1/4/06 DATE
USDA - NATIONAL RESOURCES CONSERVATION SERVICE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Shirley A. Hays 4/1/06 DATE
HOWARD SOIL CONSERVATION DISTRICT

APPROVED: DEPARTMENT OF PUBLIC WORKS
Walter T. Mahan 1-19-06 DATE
CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cindy Hamer 1/31/06 DATE
CHIEF, DIVISION OF LAND DEVELOPMENT

Donald A. Mason 8/22/06 DATE
CHIEF, DEVELOPMENT ENGINEERING DIVISION

NO.	DATE	REVISION
1	8-21-06	REVISE SEPTIC ESMTs ON LOTS 23/24, REVISE LIMITS OF FCE #2

BENCHMARK
ENGINEERS & LAND SURVEYORS & PLANNERS
ENGINEERING, INC.

8480 BALTIMORE NATIONAL PIKE & SUITE 418
ELLCOTT CITY, MARYLAND 21043
PHONE: 410-465-6105 & FAX: 410-465-6644
WWW.BEL-CIVILENGINEERING.COM

Donald A. Mason 12/23/05

OWNER/DEVELOPER: C/O JAMES H. SELFRIDGE BUILDERS, INC. 14045 GARED DRIVE GLENWOOD, MARYLAND 21738

PROJECT: CLARKS MEADOW LOTS 1-26 NON-BUILDABLE PRESERVATION PARCELS 'A' THRU 'G' A RESUBDIVISION OF CLARK'S WOODS I, LOT 4, PLAT NO. 14203

LOCATION: TAX MAP: 21 ZONED: RC-DEO GRID: 17 PARCEL: 227 ELECTION DISTRICT NO. 4 HOWARD COUNTY, MARYLAND

TITLE: GRADING, SEDIMENT AND EROSION CONTROL PLAN

DATE: JANUARY, 2006 PROJECT NO. 1736

DESIGN: DBT DRAFT: DBT CHECK: CAM SCALE: 1" = 50' SHEET 6 OF 19

SEDIMENT BASIN #3 DATA	
EXISTING D.A.	13.07 ac.
PROPOSED D.A.	12.10 ac.
STORAGE REQUIRED	21,780 CF
STORAGE PROVIDED	21,780 CF
EMBANKMENT ELEVATION	515.00
RISER CREST ELEVATION	512.00
CLEANOUT ELEVATION	508.30
BOTTOM ELEVATION	505.20
WET STORAGE ELEVATION	509.00
DRY STORAGE ELEVATION	510.27
Q1 PRE-DEVELOPMENT	0.65 cfs
Q1 DURING-DEVELOPMENT	0.55 cfs

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE AS-BUILT PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

Cheryl PE NO. 13204
DATE 8/23/13

CERTIFY MEANS TO STATE OR DECLARE A PROFESSIONAL OPINION BASED UPON ON-SITE INSPECTIONS AND MATERIAL TESTS WHICH ARE CONDUCTED DURING CONSTRUCTION. THE ON-SITE INSPECTIONS AND MATERIAL TESTS ARE THOSE INSPECTIONS AND TESTS DEEMED SUFFICIENT AND APPROPRIATE BY COMMONLY ACCEPTED ENGINEERING STANDARDS. CERTIFY DOES NOT MEAN OR IMPLY A GUARANTEE BY THE ENGINEER NOR DOES AN ENGINEER'S CERTIFICATION RELIEVE ANY OTHER PARTY FROM MEETING REQUIREMENTS IMPOSED BY CONTRACT, EMPLOYMENT, OR OTHER MEANS, INCLUDING MEETING COMMONLY ACCEPTED INDUSTRY PRACTICES.

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James H. Selfridge 1/1/06
DEVELOPER DATE

BY THE ENGINEER:

I/WE CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTICED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

Donald A. Mason 12/23/05
ENGINEER - DONALD A. MASON, P.E. # 21443 DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL.

Jim Meyer 1/1/06
USDA - NATURAL RESOURCES CONSERVATION SERVICE DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

John A. ... 1/1/06
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS

William F. ... 1-19-06
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

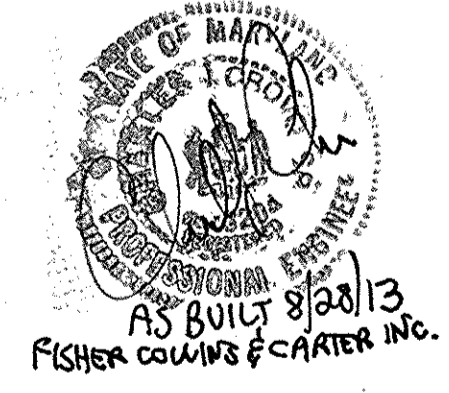
Candy ... 1/31/05
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Donald Moon 1/23/05
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

NOTE:
EROSION CONTROL MATTING TO BE PLACED IN ALL ROADSIDE DITCHES.

NOTE:
CONTRACTOR SHALL CURL ALL ENDS OF SILT FENCE AND SUPER SILT FENCE UPHILL BY 2 FEET IN ELEVATION.

MATCH LINE SEE SHEET 5



LEGEND

	EXISTING CONTOURS		SILT DIVERSION FENCE
	EXISTING TREELINE		SUPER SILT FENCE
	EXISTING WETLANDS		LIMIT OF DISTURBANCE
	EXISTING STREAM		EARTH DIKE
	PROPOSED SEWAGE DISPOSAL AREA		TEMPORARY CONTOURS FOR SEDIMENT BASIN
	PROPOSED FOREST CONSERVATION EASEMENT		EROSION CONTROL MATTING
	REMOVABLE PUMPING STATION		STORMWATER MANAGEMENT CREDIT AND UTILITY EASEMENT
			INLET PROTECTION

NO.	DATE	REVISION
1	8-21-06	RELOCATE SWALE & DRAINAGE ESMT. OFF OF FLAGSTEM OF LOT 11

BENCHMARK ENGINEERING, INC.
ENGINEERS • LAND SURVEYORS • PLANNERS

8480 BALTIMORE NATIONAL PIKE • SUITE 418
ELLCOTT CITY, MARYLAND 21043
PHONE: 410-465-6105 • FAX: 410-465-6644
www.bei-civilengineering.com

Donald Moon
12/23/05

OWNER/DEVELOPER: C/O JAMES H. SELFRIDGE BUILDERS, INC. 14045 GARED DRIVE GLENWOOD, MARYLAND 21738

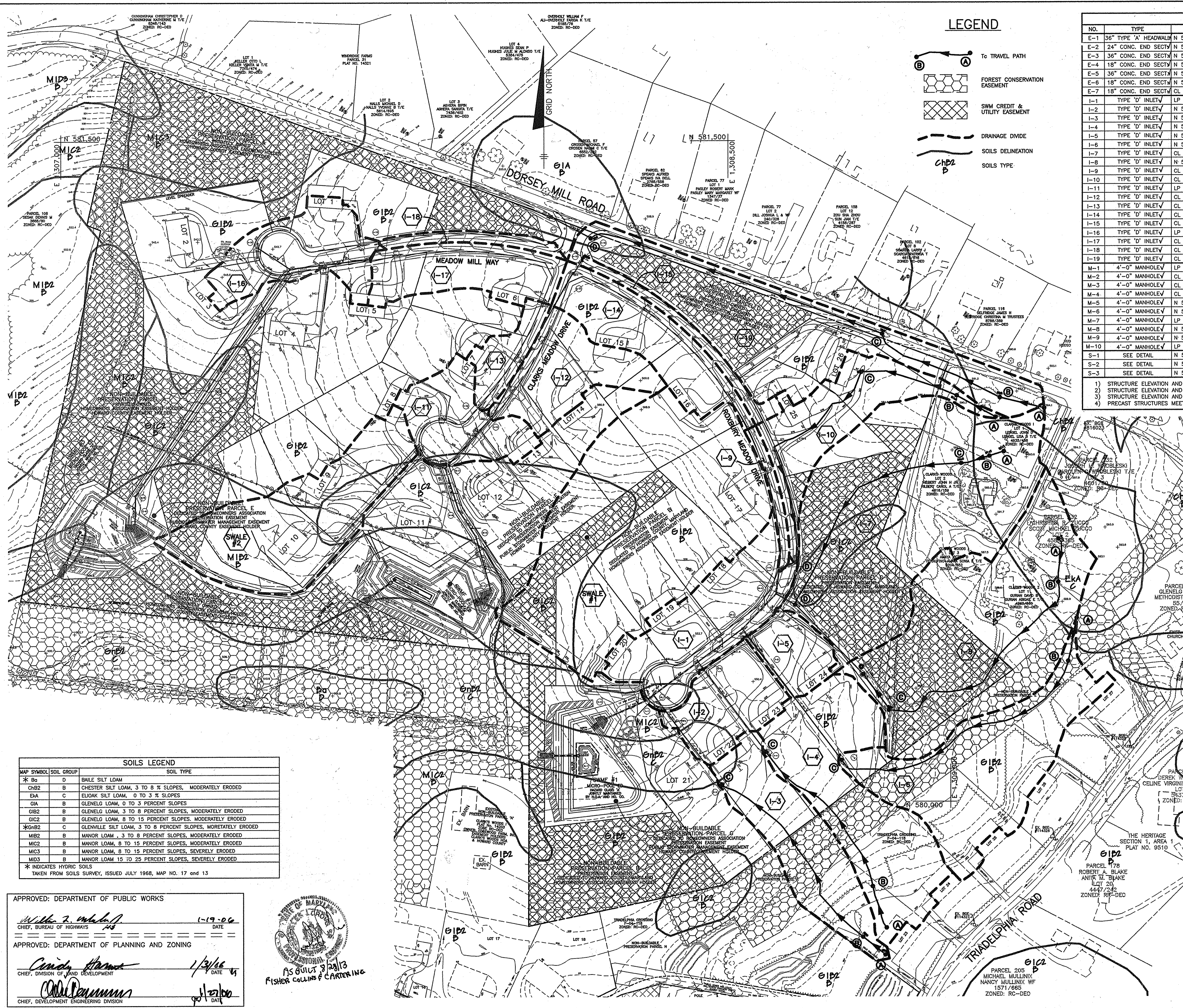
PROJECT: CLARKS MEADOW LOTS 1-26 NON-BUILDABLE PRESERVATION PARCELS 'A' THRU 'G' FOREST MITIGATION BANK A RESUBDIVISION OF CLARKS WOODS I, LOT 4, PLAT NO. 14203

LOCATION: TAX MAP: 21 PARCEL: 227 GRID: 17 ZONED: RC-DEO ELECTION DISTRICT NO. 4 HOWARD COUNTY, MARYLAND

TITLE: GRADING, SEDIMENT AND EROSION CONTROL PLAN

DATE: JANUARY, 2006 PROJECT NO. 1736

DESIGN: DBT DRAFT: DBT CHECK: CAM SCALE: 1" = 50' SHEET 7 OF 19



LEGEND

- TO TRAVEL PATH
- FOREST CONSERVATION EASEMENT
- SWM CREDIT & UTILITY EASEMENT
- DRAINAGE DIVIDE
- SOILS DELINEATION
- SOILS TYPE

STRUCTURE SCHEDULE

NO.	TYPE	LOCATION	INV. IN	INV. OUT	TOP ELEV.	HO. CO. STD.
E-1	36" TYPE 'A' HEADWALL	N 580108.00 E 1308105.00 0.26	533.00-21	533.00-21	537.00-24	SD - 5.11
E-2	24" CONC. END SECT	N 580183.00 E 1308224.00 0.20	540.00-1	540.00-1	---	SD - 5.52
E-3	36" CONC. END SECT	N 580467.00 E 1307697.00 10.17	521.00-29	521.00-20	---	SD - 5.52
E-4	18" CONC. END SECT	N 580487.00 E 1307955.00 3.10	525.15-04	525.00-10	---	SD - 5.52
E-5	36" CONC. END SECT	N 580547.00 E 1307016.00 1.10	506.00-19	505.00-23	---	SD - 5.52
E-6	18" CONC. END SECT	N 580625.00 E 1307166.00 7.22	514.42-01	511.00-07	---	SD - 5.52
E-7	18" CONC. END SECT	CL STA. 0+22.55 OFFS. 85.50' RIGHT (CLARKS MEADOW)	554.00-49	554.00-40	---	SD - 5.52
I-1	TYPE 'D' INLET	LP STA. 1+42.26 OFFS. 85.50' LEFT (ROXBURY MEADOW)	541.00-02	541.00-47	548.00-19	SD - 4.11 OR 4.39
I-2	TYPE 'D' INLET	N 580162.00 E 1308387.00 7.71	542.27-14	542.02-3	546.00-50	SD - 4.11 OR 4.39
I-3	TYPE 'D' INLET	N 580034.00 E 1308404.00 7.50	---	544.36-05	548.00-40	SD - 4.11 OR 4.39
I-4	TYPE 'D' INLET	N 580113.00 E 1308584.00 9.10	---	547.07-01	552.00-2	SD - 4.11 OR 4.39
I-5	TYPE 'D' INLET	N 580310.00 E 1308599.00 3.71	549.00-04	549.00-09	553.00-10	SD - 4.11 OR 4.39
I-6	TYPE 'D' INLET	N 580057.00 E 1308757.00 0.94	---	553.07-20	558.00-29	SD - 4.11 OR 4.39
I-7	TYPE 'D' INLET	CL STA. 9+22.79 OFFS. 105.50' LEFT (ROXBURY MEADOW)	533.34-9	553.44-39	557.00-78	SD - 4.11 OR 4.39
I-8	TYPE 'D' INLET	N 580285.00 E 1308903.00 10.12	---	556.04-04	560.00-20	SD - 4.11 OR 4.39
I-9	TYPE 'D' INLET	CL STA. 9+22.00 OFFS. 117.00' RIGHT (ROXBURY MEADOW)	556.00-04	556.00-07	564.00-37	SD - 4.11 OR 4.39
I-10	TYPE 'D' INLET	CL STA. 9+00.00 OFFS. 117.00' LEFT (ROXBURY MEADOW)	---	561.44-44	565.00-17	SD - 4.11 OR 4.39
I-11	TYPE 'D' INLET	LP STA. 1+44.16 OFFS. 85.50' LEFT (CLARKS MEADOW)	---	563.00-06	564.00-0	SD - 4.11 OR 4.39
I-12	TYPE 'D' INLET	CL STA. 5+00.00 OFFS. 17.00' LEFT (CLARKS MEADOW)	---	545.31-29	551.00-76	SD - 4.11 OR 4.39
I-13	TYPE 'D' INLET	CL STA. 5+00.00 OFFS. 17.00' RIGHT (CLARKS MEADOW)	---	547.21-20	551.00-20	SD - 4.11 OR 4.39
I-14	TYPE 'D' INLET	CL STA. 1+22.24 OFFS. 21.00' LEFT (CLARKS MEADOW)	555.10-49	554.00-00	560.00-00	SD - 4.11 OR 4.39
I-15	TYPE 'D' INLET	CL STA. 0+48.47 OFFS. 31.10' LEFT (CLARKS MEADOW)	---	555.70-40	560.00-10	SD - 4.11 OR 4.39
I-16	TYPE 'D' INLET	LP STA. 1+65.00 OFFS. 85.50' LEFT (MEADOW MILL)	---	535.10-43	530.00-13	SD - 4.11 OR 4.39
I-17	TYPE 'D' INLET	CL STA. 4+22.00 OFFS. 17.00' LEFT (MEADOW MILL)	541.44-71	541.21-25	546.70-09	SD - 4.11 OR 4.39
I-18	TYPE 'D' INLET	CL STA. 4+22.00 OFFS. 17.00' LEFT (MEADOW MILL)	---	543.52-1	547.00-50	SD - 4.11 OR 4.39
I-19	TYPE 'D' INLET	CL STA. 0+40.24 OFFS. 32.20' LEFT (CLARKS MEADOW)	---	555.00-19	558.00-3	SD - 4.11 OR 4.39
M-1	4'-0" MANHOLE	LP STA. 1+44.16 OFFS. 105.50' RIGHT (ROXBURY MEADOW)	541.00-18	541.00-29	549.00-30	G - 5.12
M-2	4'-0" MANHOLE	CL STA. 12+16.40 OFFS. 117.00' RIGHT (ROXBURY MEADOW)	543.00-15	543.00-32	544.00-02	G - 5.12
M-3	4'-0" MANHOLE	CL STA. 10+38.22 OFFS. 117.00' LEFT (ROXBURY MEADOW)	547.00-18	547.00-36	550.15-1	G - 5.12
M-4	4'-0" MANHOLE	CL STA. 9+22.00 OFFS. 21.10' RIGHT (ROXBURY MEADOW)	552.00-19	552.00-27	563.00-47	G - 5.12
M-5	4'-0" MANHOLE	N 580602.00 E 1307938.00 3.90	520.00-14	520.00-17	538.00-0	G - 5.12
M-6	4'-0" MANHOLE	N 580661.48 E 1307894.00	535.40	535.20	539.20	G - 5.12
M-7	4'-0" MANHOLE	LP STA. 1+10.24 OFFS. 15.00' LEFT (CLARKS MEADOW)	539.15-11	539.15-11	545.00-10	G - 5.12
M-8	4'-0" MANHOLE	N 580698.00 E 1307167.00 4.00	512.52	512.32	516.00	G - 5.12
M-9	4'-0" MANHOLE	N 580941.00 E 1307333.00 0.56	520.00-14	520.00-01	532.00-09	G - 5.12
M-10	4'-0" MANHOLE	LP STA. 0+38.22 OFFS. 3.00' RIGHT (MEADOW MILL)	533.00-13	533.00-31	542.40-08	G - 5.12
S-1	SEE DETAIL	N 580108.00 E 1308162.50 7	---	533.50-0	542.40-77	---
S-2	SEE DETAIL	N 580498.00 E 1307740.00 19.99	---	521.00-00	528.00-24	---
S-3	SEE DETAIL	N 580596.00 E 1307034.00 5.56	---	507.00-05	514.00-37	---

- 1) STRUCTURE ELEVATION AND LOCATION FOR MANHOLES IS AT THE TOP AND CENTER OF RIM.
- 2) STRUCTURE ELEVATION AND LOCATION FOR INLETS IS AT THE TOP OF CURB AT MIDPOINT OF THE INLET OR AT THE CENTER OF SLAB FOR "D" INLETS.
- 3) STRUCTURE ELEVATION AND LOCATION FOR ENDSECTIONS IS AT THE MIDPOINT AT THE END OF STRUCTURE.
- 4) PRECAST STRUCTURES MEETING HS-20 LOADING MAY BE USED.

GRADES SHOWN ON THIS PLAN ARE ULTIMATE GRADES

ALL DRIVEWAY CULVERTS ARE TO BE 15" RCCP PER COMPUTATIONS.

STORM DRAIN DATA

INLET NO.	AREA (AC)	% IMPERVIOUS	SOIL CLASS	ZONING	'C' FACTOR
I-1	1.74	31.5	B	RC-DEO	0.32
I-2	0.98	20.0	B,C	RC-DEO	0.22
I-3	1.57	15.2	B,C	RC-DEO	0.19
I-4	2.49	17.6	B	RC-DEO	0.20
I-5	0.56	19.3	B	RC-DEO	0.21
I-6	2.58	14.0	B	RC-DEO	0.18
I-7	4.93	11.0	B	RC-DEO	0.17
I-8	4.01	9.8	B	RC-DEO	0.16
I-9	0.18	41.1	B	RC-DEO	0.17
I-10	1.35	21.8	F	RC-DEO	0.24
I-11	1.02	33.7	B	RC-DEO	0.33
I-12	1.15	23.0	B	RC-DEO	0.24
I-13	0.45	27.6	B	RC-DEO	0.29
I-14	1.29	26.0	B	RC-DEO	0.27
I-15	0.29	39.3	B	RC-DEO	0.42
I-16	1.23	33.2	B	RC-DEO	0.33
I-17	1.12	25.4	B	RC-DEO	0.27
I-18	0.25	36.8	B	RC-DEO	0.41
I-19	3.28	16.3	B	RC-DEO	0.23
SWALE #1	5.01	16.7	B	RC-DEO	0.20
SWALE #2	2.35	16.8	B	RC-DEO	0.20

SOILS LEGEND

MAP SYMBOL	SOIL GROUP	SOIL TYPE
* Bg	D	BAILE SILT LOAM
ChB2	B	CHESTER SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED
EKA	C	ELIOAK SILT LOAM, 0 TO 3 PERCENT SLOPES
GIA	B	GLENELG LOAM, 0 TO 3 PERCENT SLOPES
GIB2	B	GLENELG LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED
GIC2	B	GLENELG LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED
*GhB2	C	GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED
MB2	B	MANOR LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED
MIC2	B	MANOR LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED
MIC3	B	MANOR LOAM, 8 TO 15 PERCENT SLOPES, SEVERELY ERODED
MID3	B	MANOR LOAM 15 TO 25 PERCENT SLOPES, SEVERELY ERODED

* INDICATES HYDRIC SOILS
TAKEN FROM SOILS SURVEY, ISSUED JULY 1968, MAP NO. 17 AND 13

APPROVED: DEPARTMENT OF PUBLIC WORKS
William J. White 1-19-06
 CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Conita Hanna 1/24/06
 CHIEF, DIVISION OF LAND DEVELOPMENT

William J. White 1/24/06
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

STATE OF MARYLAND
 DEPARTMENT OF PLANNING AND ZONING
 AS SHOWN 1/24/06
 FISHER, COLLINS & CARTER, INC.

NO. DATE REVISION

BENCHMARK ENGINEERING, INC.
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 www.bei-civilengineering.com

Donald Moon
1/23/06

OWNER/DEVELOPER: DORSEY MILL, LLC
 C/O JAMES H. SELFRIDGE BUILDERS, INC.
 14045 GARED DRIVE
 GLENWOOD, MARYLAND 21738

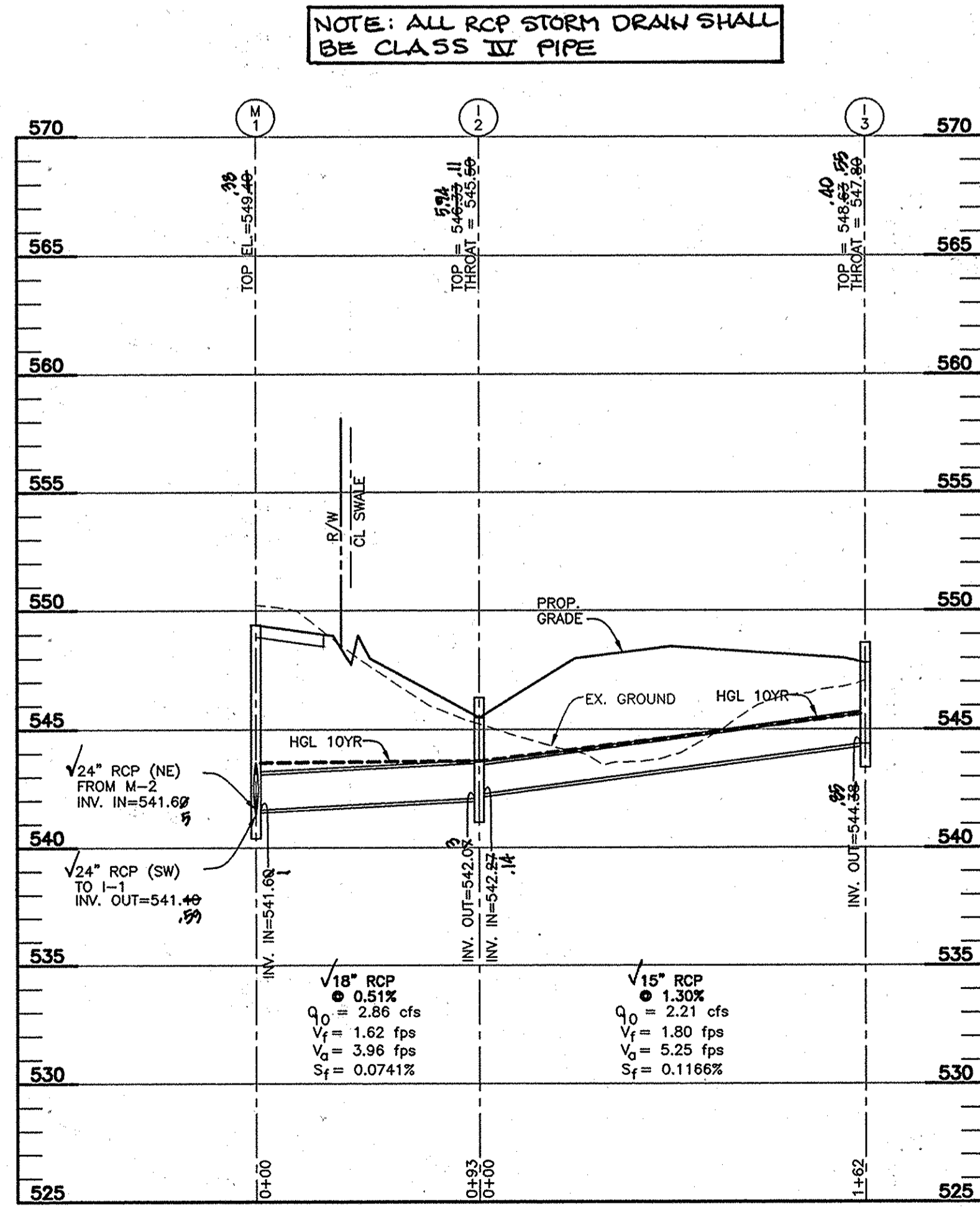
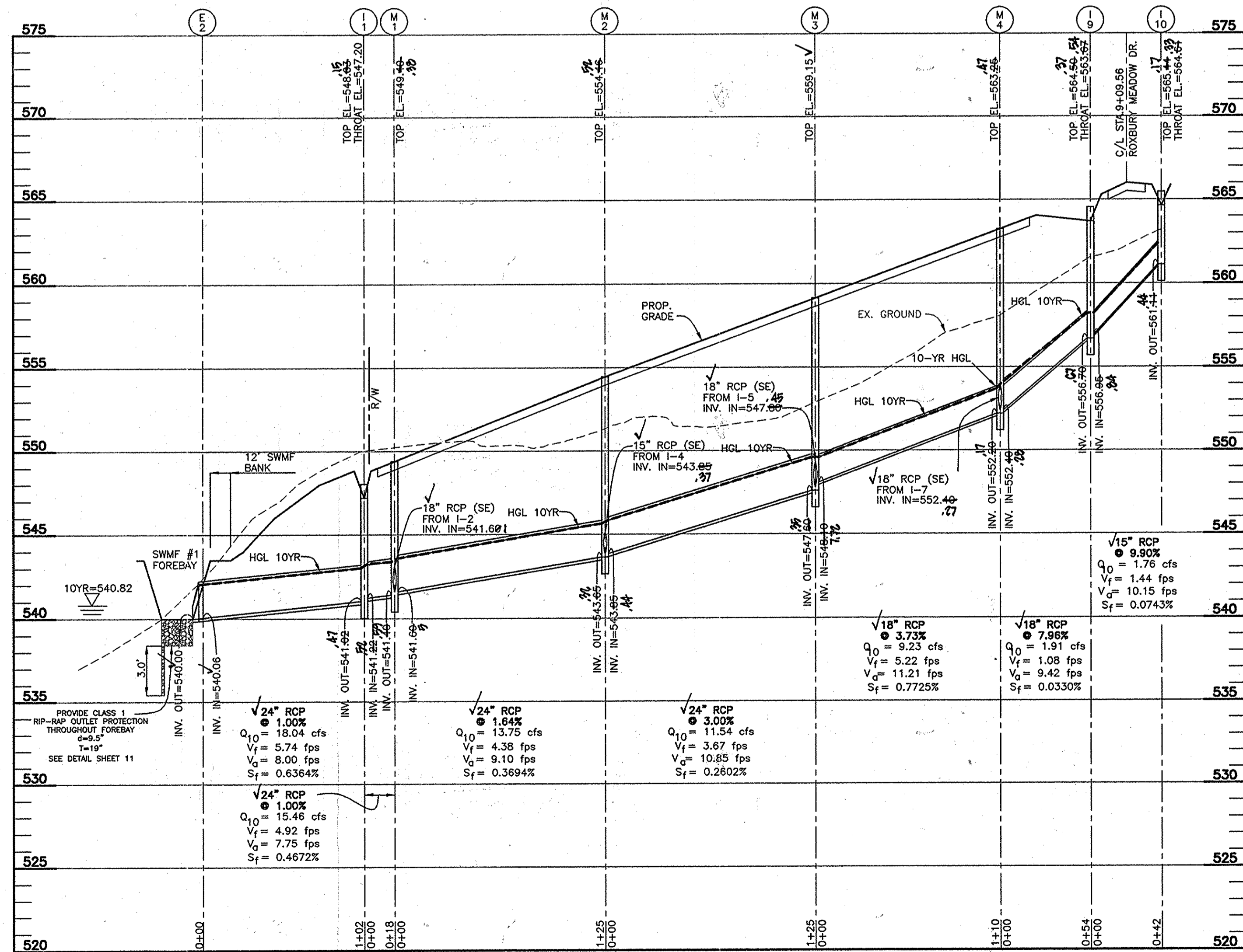
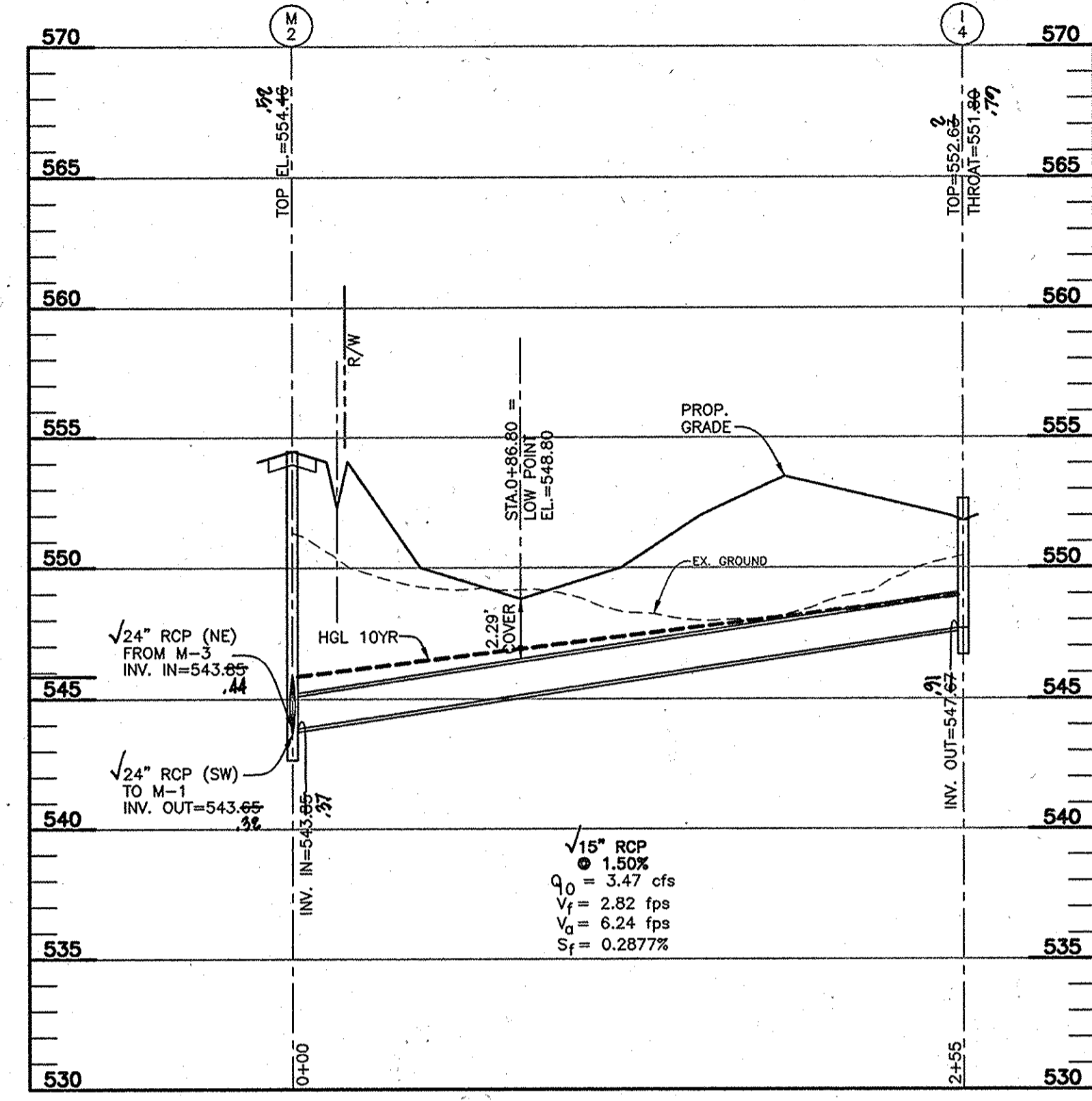
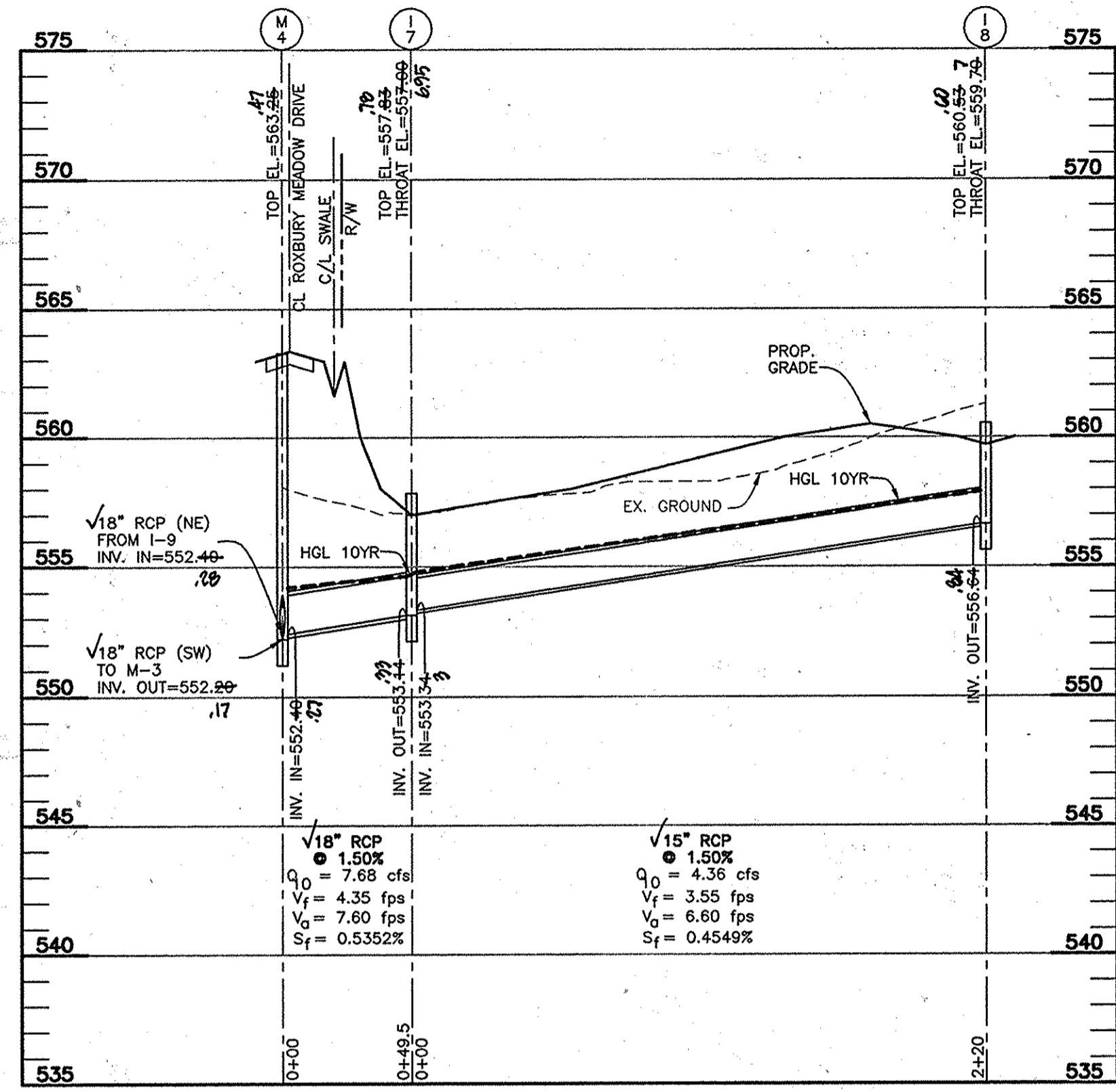
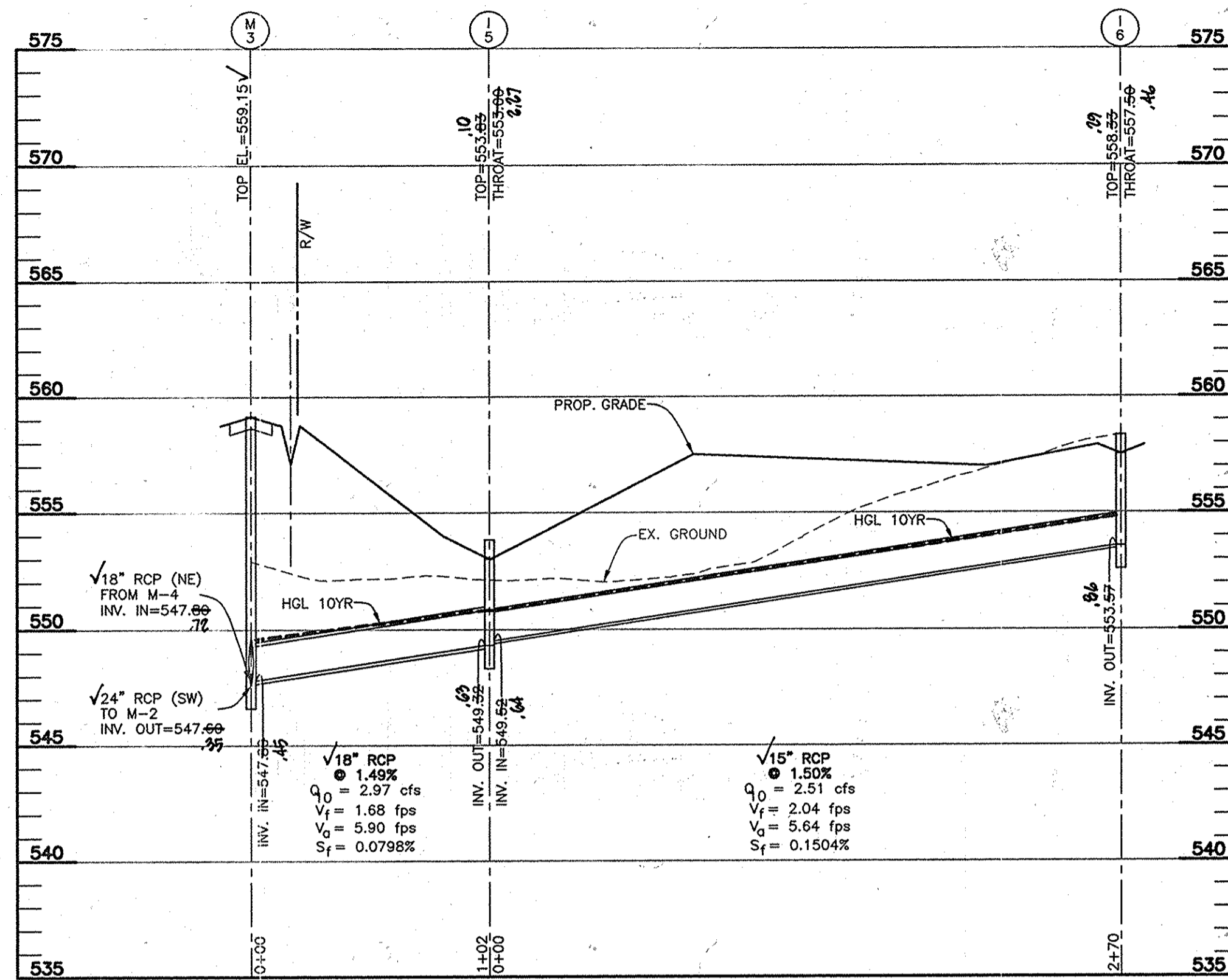
PROJECT: CLARKS MEADOW
 LOTS 1-26
 NON-BUILDABLE PRESERVATION PARCELS 'A' THRU 'G'
 FOREST MITIGATION BANK
 A RESUBDIVISION OF CLARKS WOODS I, LOT 4, PLAT NO. 14203

LOCATION: TAX MAP: 21 PARCEL: 227
 GRID: 17 ZONED: RC-DEO
 ELECTION DISTRICT NO. 4
 HOWARD COUNTY, MARYLAND

TITLE: STORM DRAIN DRAINAGE AREA MAP

DATE: JANUARY, 2006 PROJECT NO. 1736

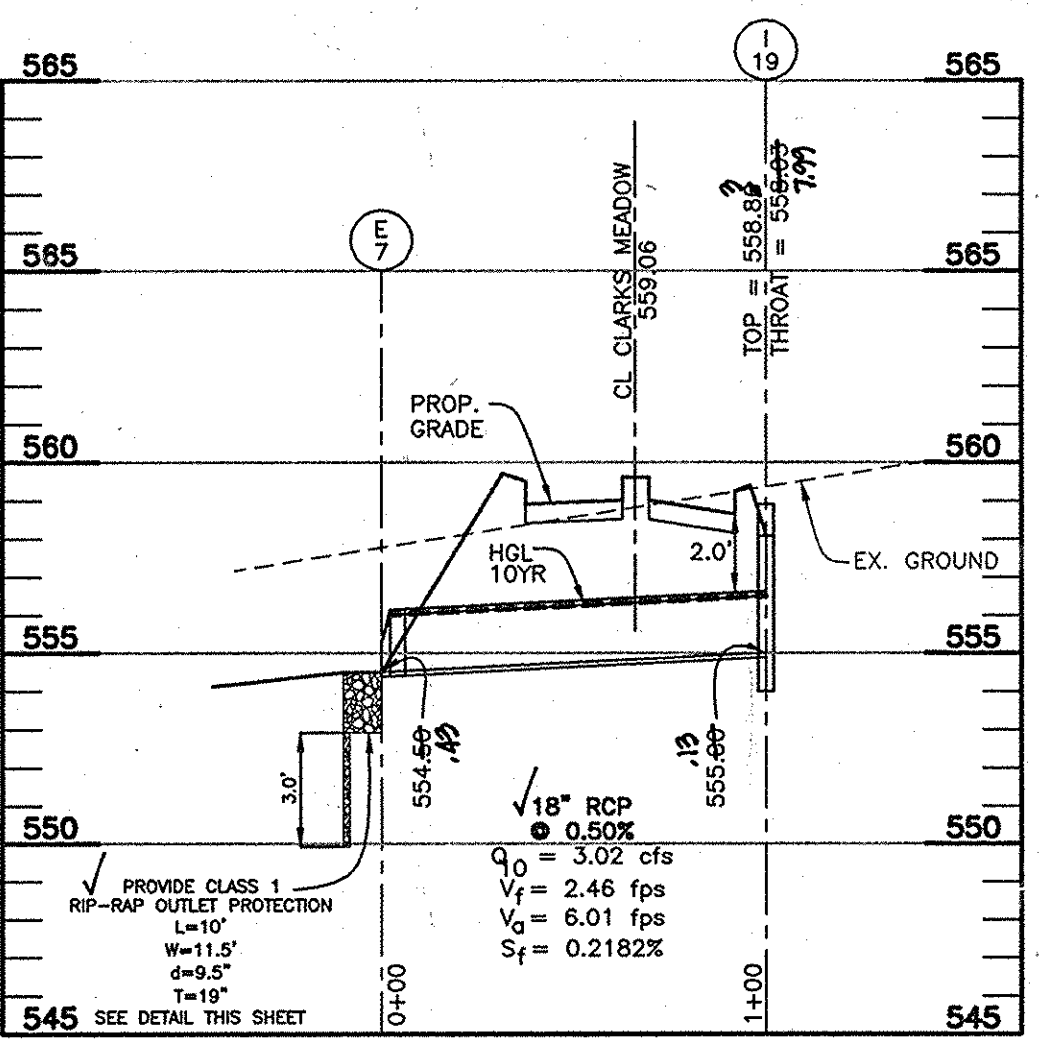
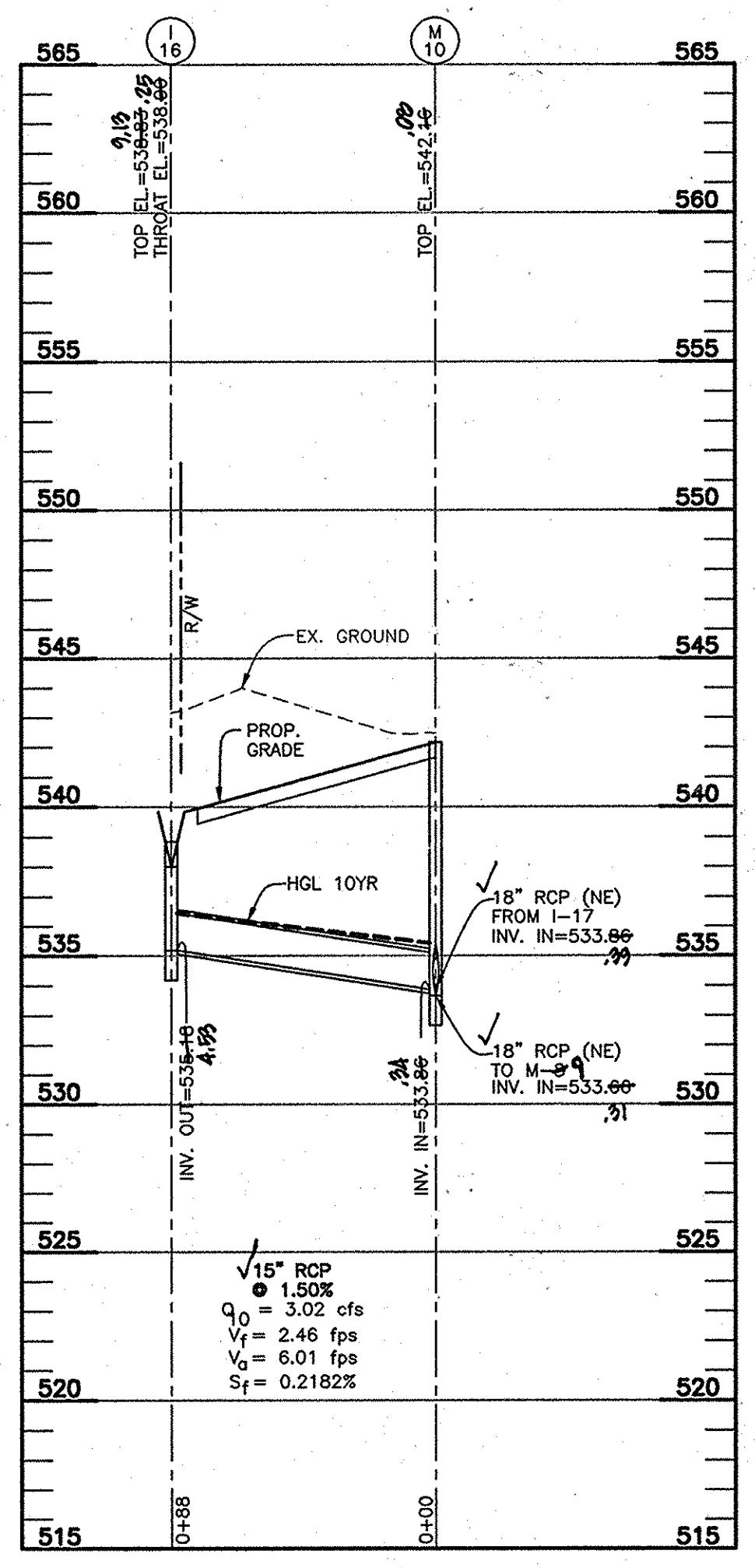
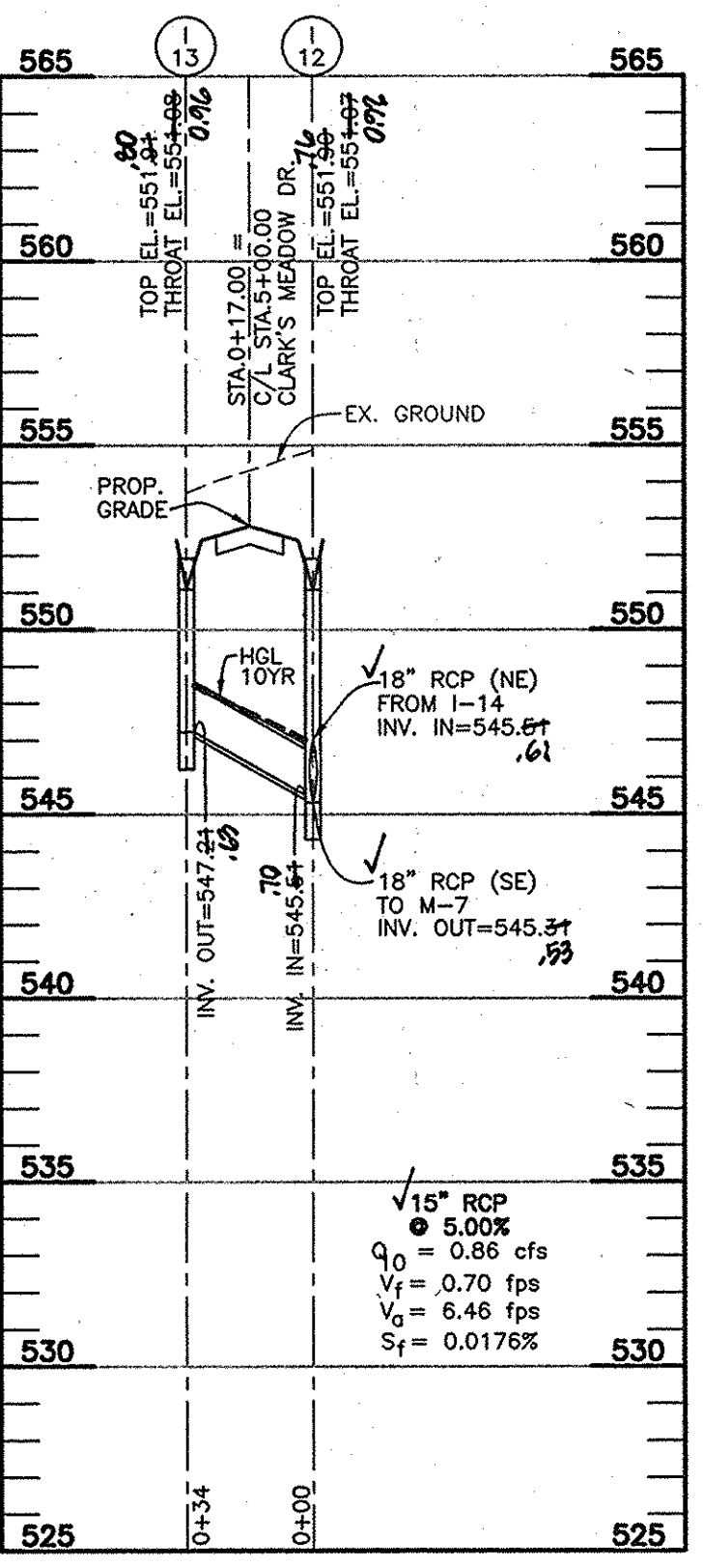
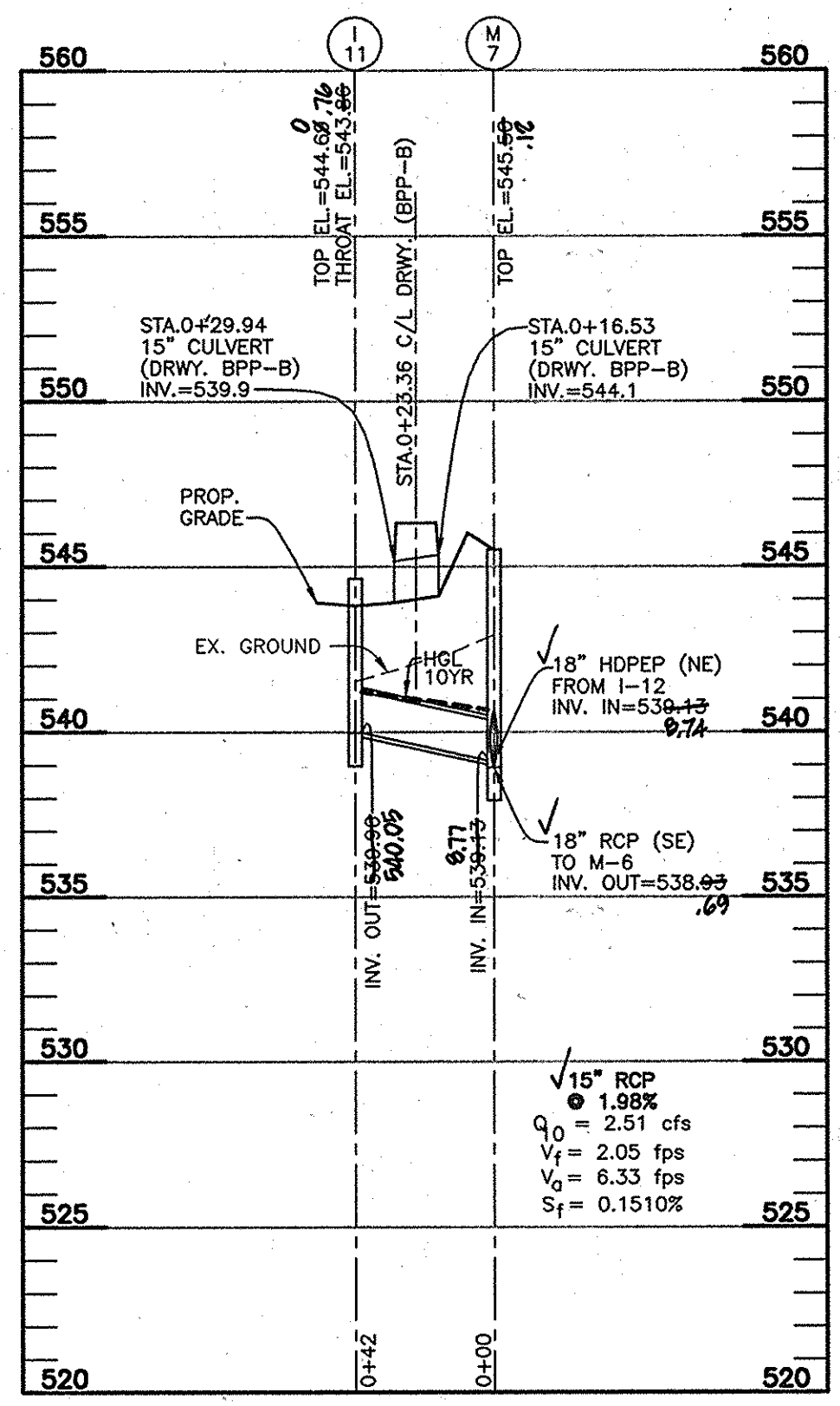
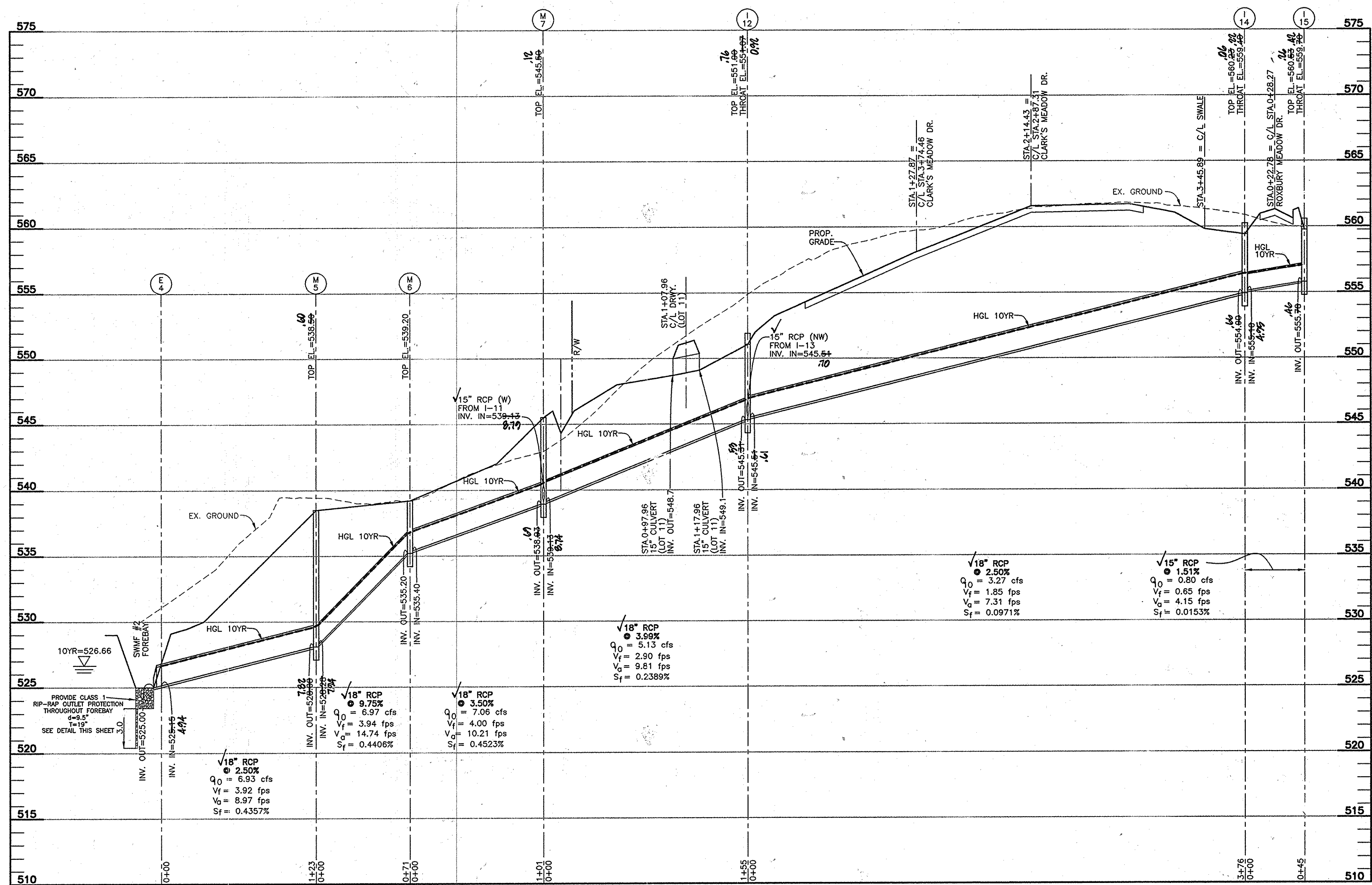
DESIGN: DBT DRAFT: DBT CHECK: CAM SCALE: 1" = 50' SHEET 9 OF 19



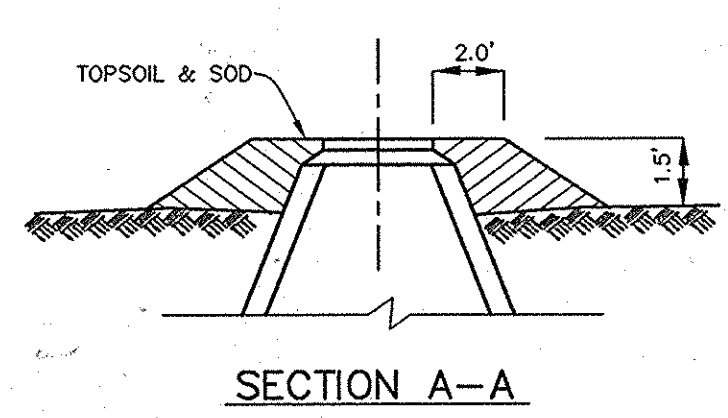
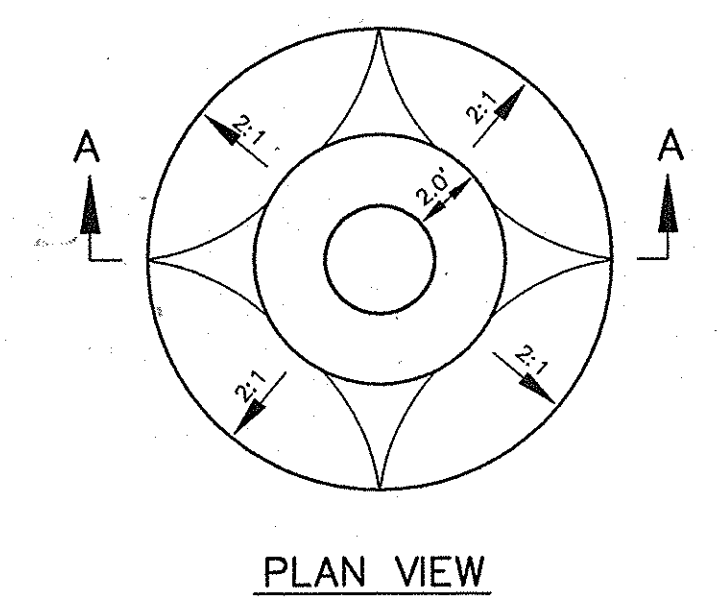
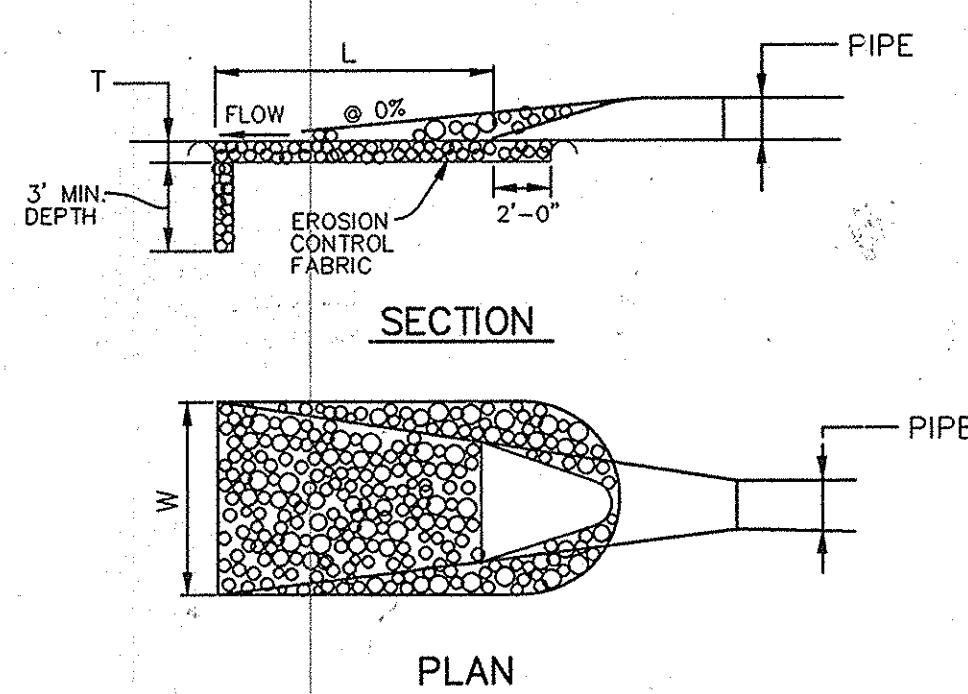
NOTE: ALL RCP STORM DRAIN SHALL BE CLASS III PIPE

APPROVED: DEPARTMENT OF PUBLIC WORKS
Walter J. ... 1-19-06
 CHIEF, BUREAU OF HIGHWAYS
 APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cindy ... 1/23/06
 CHIEF, DIVISION OF LAND DEVELOPMENT
... 1/23/06
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

NO. DATE REVISION	
BENCHMARK ENGINEERS • LAND SURVEYORS • PLANNERS ENGINEERING, INC. 8480 BALTIMORE NATIONAL PIKE • SUITE 418 ELLICOTT CITY, MARYLAND 21043 phone: 410-465-6105 • fax: 410-465-6844 www.bel-civilengineering.com	
OWNER/DEVELOPER:	PROJECT:
DORSEY MILL, LLC C/O JAMES H. SELFRIDGE BUILDERS, INC. 14045 GARED DRIVE GLENWOOD, MARYLAND 21738	CLARKS MEADOW LOTS 1-26 NON-BUILDABLE PRESERVATION PARCELS 'A' THRU 'G' FOREST MITIGATION BANK A RESUBDIVISION OF CLARKS WOODS I, LOT 4, PLAT NO. 14203 LOCATION: TAX MAP: 21 ZONED: RC-DEO GRID: 17 ELECTION DISTRICT NO. 4 HOWARD COUNTY, MARYLAND
TITLE: STORM DRAIN PROFILES	
DATE: JANUARY, 2006	PROJECT NO. 1736
DES: DBT/MCR DRAFT: DBT/MCR CHECK: DAM	SCALE: 1" = 50' SHEET 10 OF 19



- CONSTRUCTION SPECIFICATIONS**
1. THE SUBGRADE FOR THE FILTER, RIP-RAP, OR GABION SHALL BE PREPARED TO THE REQUIRED LINES AND GRADES. ANY FILL REQUIRED IN THE SUBGRADE SHALL BE COMPACTED TO A DENSITY OF APPROXIMATELY THAT OF THE SURROUNDING UNDISTURBED MATERIAL.
 2. THE ROCK OR GRAVEL SHALL CONFORM TO THE SPECIFIED GRADING LIMITS WHEN INSTALLED RESPECTIVELY IN THE RIP-RAP OR FILTER.
 3. GEOTEXTILE CLASS C28 OR BETTER SHALL BE PROTECTED FROM PUNCHING, CUTTING, OR TEARING. ANY DAMAGE OTHER THAN AN OCCASIONAL SMALL HOLE SHALL BE REPAIRED BY PLACING ANOTHER PIECE OF GEOTEXTILE FABRIC OVER THE DAMAGED PART OR BY COMPLETELY REPLACING THE GEOTEXTILE FABRIC. ALL OVERLAPS WHETHER FOR REPAIRS OR FOR JOINING TWO PIECES OF GEOTEXTILE FABRIC SHALL BE A MINIMUM OF ONE FOOT.
 4. STONE FOR THE RIP-RAP OR GABION OUTLETS MAY BE PLACED BY EQUIPMENT. THEY SHALL BE CONSTRUCTED TO THE FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO AVOID DISPLACEMENT OF UNDERLYING MATERIALS. THE STONE FOR THE RIP-RAP OR GABION OUTLETS SHALL BE DELIVERED AND PLACED IN A MANNER THAT WILL ENSURE THAT IT IS HOMOGENEOUS WITH THE SMALLER STONES AND SPALLS FILLING THE VOIDS BETWEEN THE LARGER STONES. RIP-RAP SHALL BE PLACED IN A MANNER TO PREVENT DAMAGE TO THE FILTER ELEMENT OR GEOTEXTILE FABRIC. HAND PLACEMENT WILL BE REQUIRED TO THE EXTENT NECESSARY TO PREVENT DAMAGE TO THE PERMANENT WORKS.
 5. THE STONE SHALL BE PLACED SO THAT IT BLENDS IN WITH THE EXISTING GROUND. IF THE STONE IS PLACED TOO HIGH THEN THE FLOW WILL BE FORCED OUT OF THE CHANNEL AND SCOUR ADJACENT TO THE STONE WILL OCCUR.



PIPE SCHEDULE		
PIPE SIZE	LENGTH	TYPE
15"	1200'	RCCP
18"	2205.5'	RCCP
24"	370'	RCCP
36"	134'	RCCP ASTM C-361

NOTE: ALL RCP STORM DRAIN SHALL BE CLASS IV PIPE

- NOTES:**
1. ALL MANHOLE FRAME AND COVERS SHALL BE FLUSH WITH GRADE EXCEPT WHEN SHOWN ON PROFILE TO BE SET HIGHER THAN GRADE.
 2. MANHOLE FRAME AND COVERS TO BE SET HIGHER THAN GRADE SHALL BE SET IN ACCORDANCE WITH THIS DETAIL.

FILL AROUND MANHOLE
NOT TO SCALE

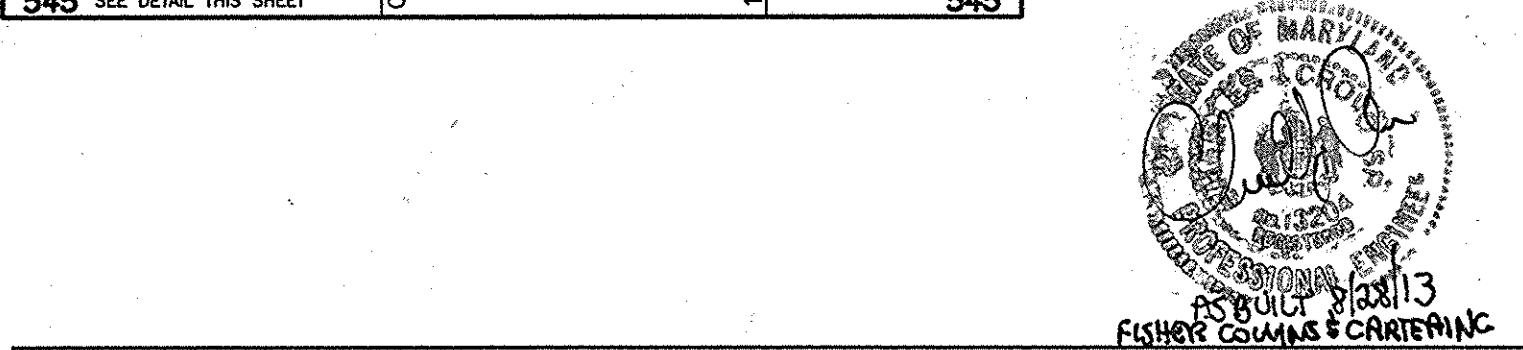
STRUCTURE	D-50	LENGTH (L)	WIDTH (W)	THICKNESS (T)	SMA CLASS
E-1	9.5"	28'	14.2'	19"	I
E-2	9.5"	FOREBAY	FOREBAY	19"	I
E-3	9.5"	18'	16'	19"	I
E-4	9.5"	FOREBAY	FOREBAY	19"	I
E-5	9.5"	30'	15'	19"	I
E-6	9.5"	FOREBAY	FOREBAY	19"	I
E-7	9.5"	10'	11.5'	19"	I

OUTLET PROTECTION DETAIL
NOT TO SCALE

APPROVED: DEPARTMENT OF PUBLIC WORKS
William J. ... 1-19-06
CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Andy ... 1/21/06
CHIEF, DIVISION OF LAND DEVELOPMENT

... 1/21/06
CHIEF, DEVELOPMENT ENGINEERING DIVISION



NO.	DATE	REVISION

BENCHMARK ENGINEERING, INC.
ENGINEERS • LAND SURVEYORS • PLANNERS
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ELLCOTT CITY, MARYLAND 21043
PHONE: 410-465-6105 • FAX: 410-465-6644
WWW.BEI-CIVILENGINEERING.COM

Donald Moon
12/23/06

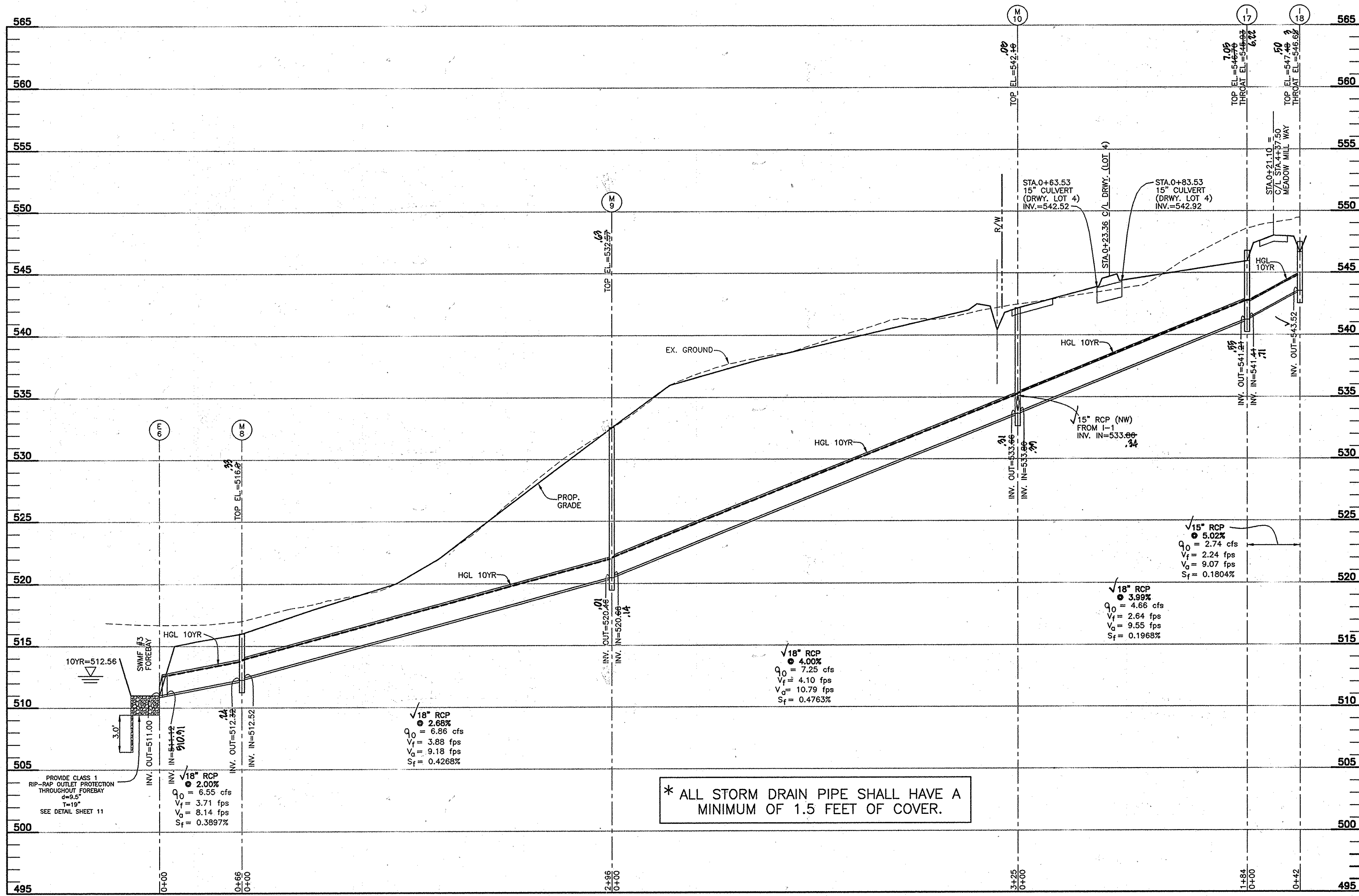
OWNER/DEVELOPER: DORSEY MILL, LLC
C/O JAMES H. SELFRIDGE BUILDERS, INC.
14045 GARED DRIVE
GLENWOOD, MARYLAND 21738

PROJECT: CLARKS MEADOW
LOTS 1-26
NON-BUILDABLE PRESERVATION PARCELS 'A' THRU 'G'
FOREST MITIGATION BANK
A RESUBDIVISION OF CLARKS WOODS I, LOT 4, PLAT NO. 14203

LOCATION: TAX MAP: 21 PARCEL: 227
GRID: 17 ZONED: RC-DEO
ELECTION DISTRICT NO. 4
HOWARD COUNTY, MARYLAND

TITLE: STORM DRAIN PROFILES

DATE: JANUARY, 2006 PROJECT NO. 1736
SCALE: 1" = 50' SHEET 11 OF 19



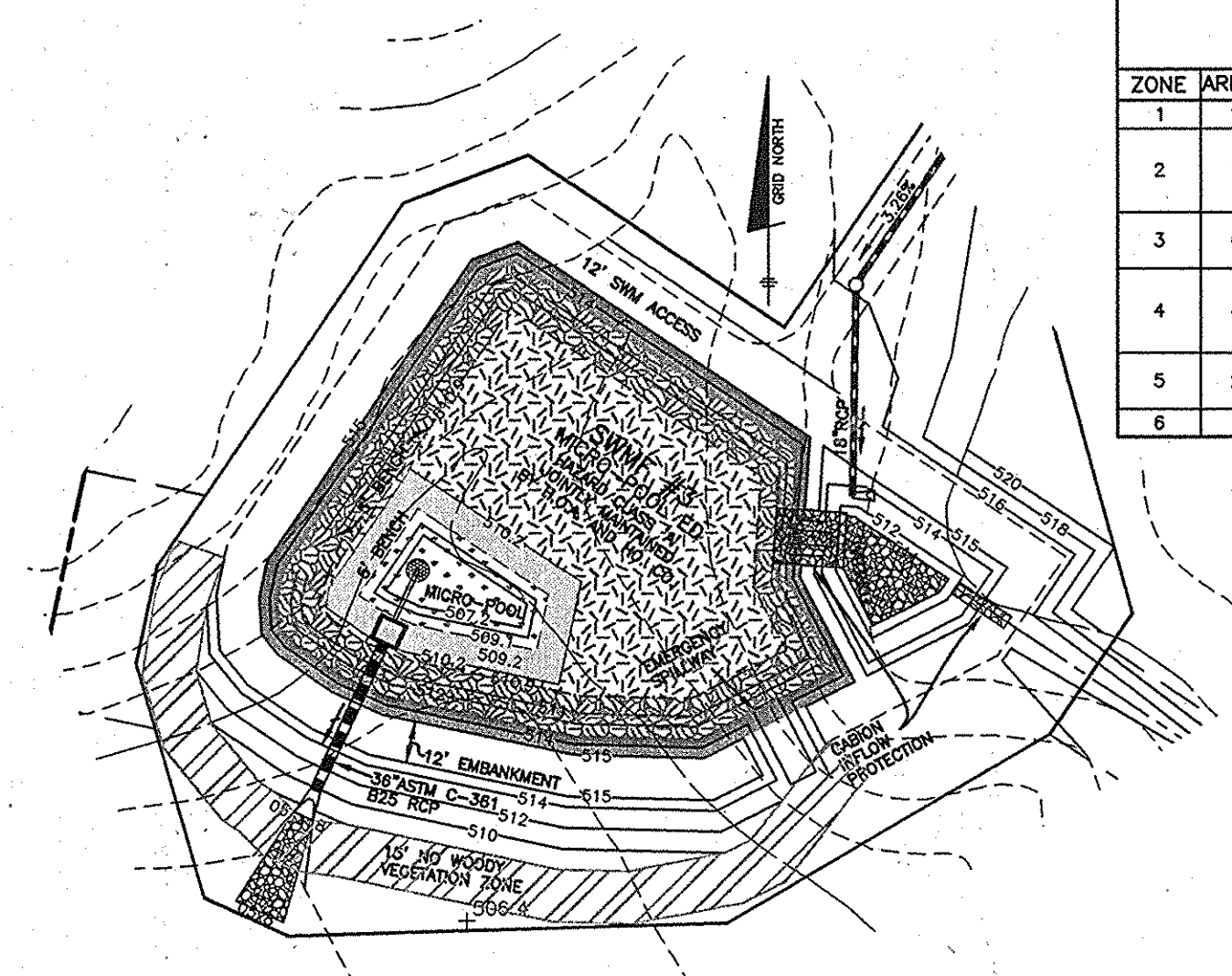
PROFILE
SCALE: 1" = 50' HORIZ., 1" = 5' VERT.

* ALL STORM DRAIN PIPE SHALL HAVE A MINIMUM OF 1.5 FEET OF COVER.

INTERNAL PLANTING SCHEDULE FOR EXTENDED DETENTION FACILITY #3

ZONE	AREA (SF)	ELEVATION RANGE	PLANT MIX	QUANTITIES
1	1,224	507.20 - 509.10	100% WATER LILLY	136
2	1,408	509.10 - 510.20	50% BROAD WATER WEED 25% DUCK POTATO 25% ARROW ARUM	78 39 39
3	6,732	510.20 - 510.90	50% CUTGRASS, RICE 50% SWITCHGRASS	374 374
4	4,645	510.90 - 513.11	50% LOVEGRASS-MEADOW 25% VIOLETS, COMMON BLUE 25% CONEFLOWER, CUT-LEAF	258 129 129
5	2,578	513.11 - 514.00	75% WITCHGRASS, NEEDLE-LEAF 25% CONEFLOWER, SWEET	215 72
6	0 SF	N/A	N/A	N/A

NOTE: ALL PLANTINGS TO BE QUART BULBS SPACED 3' O.C.

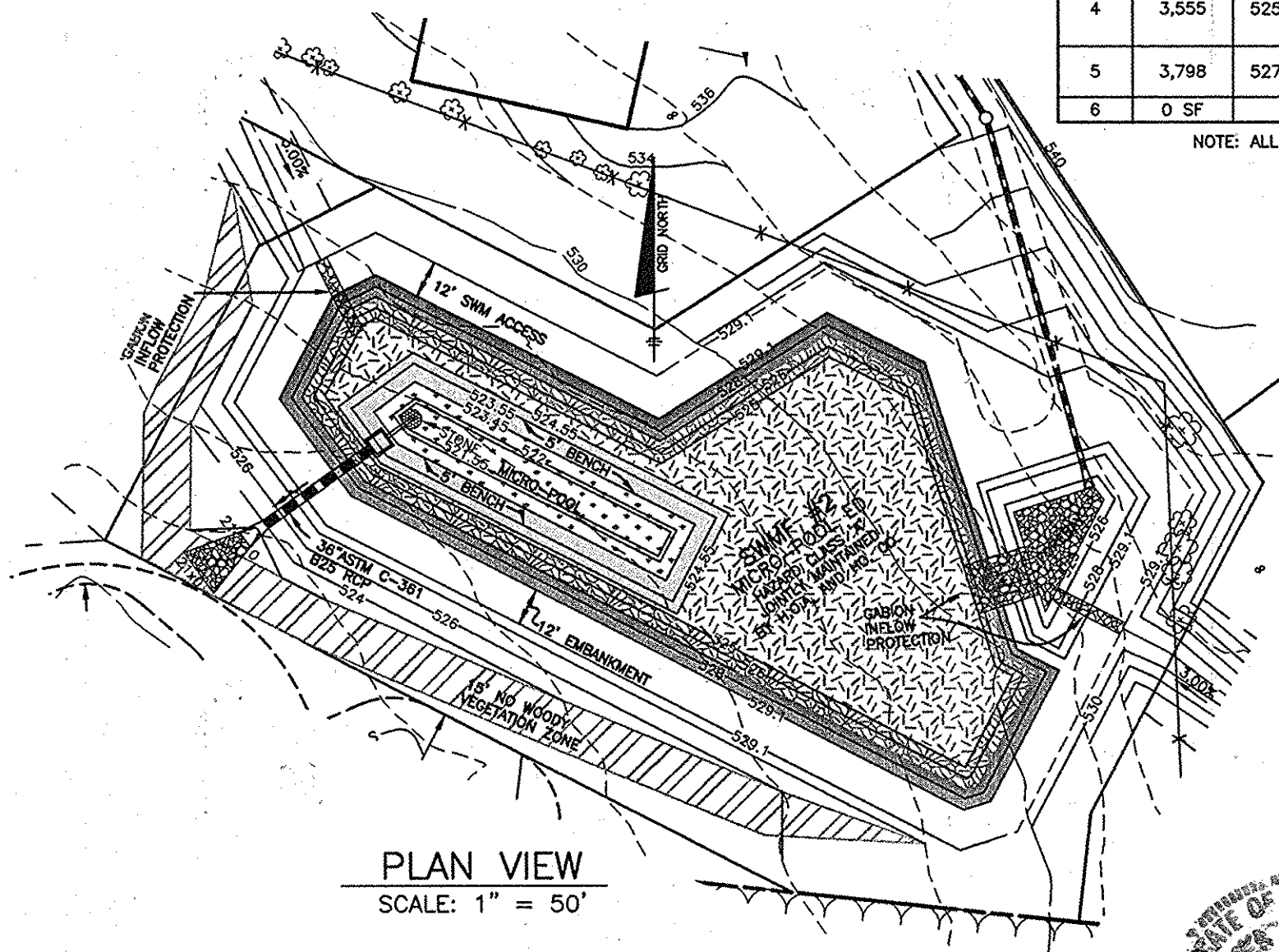


PLAN VIEW
SCALE: 1" = 50'

INTERNAL PLANTING SCHEDULE FOR EXTENDED DETENTION FACILITY #2

ZONE	AREA (SF)	ELEVATION RANGE	PLANT MIX	QUANTITIES
1	2,062	521.55 - 523.45	100% WATER LILLY	229
2	2,199	523.45 - 524.55	50% BROAD WATER WEED 25% DUCK POTATO 25% ARROW ARUM	122 61 61
3	9,211	524.55 - 525.00	50% CUTGRASS, RICE 50% SWITCHGRASS	512 512
4	3,555	525.00 - 527.05	50% LOVEGRASS-MEADOW 25% VIOLETS, COMMON BLUE 25% CONEFLOWER, CUT-LEAF	198 99 99
5	3,798	527.05 - 529.10	75% WITCHGRASS, NEEDLE-LEAF 25% CONEFLOWER, SWEET	316 105
6	0 SF	N/A	N/A	N/A

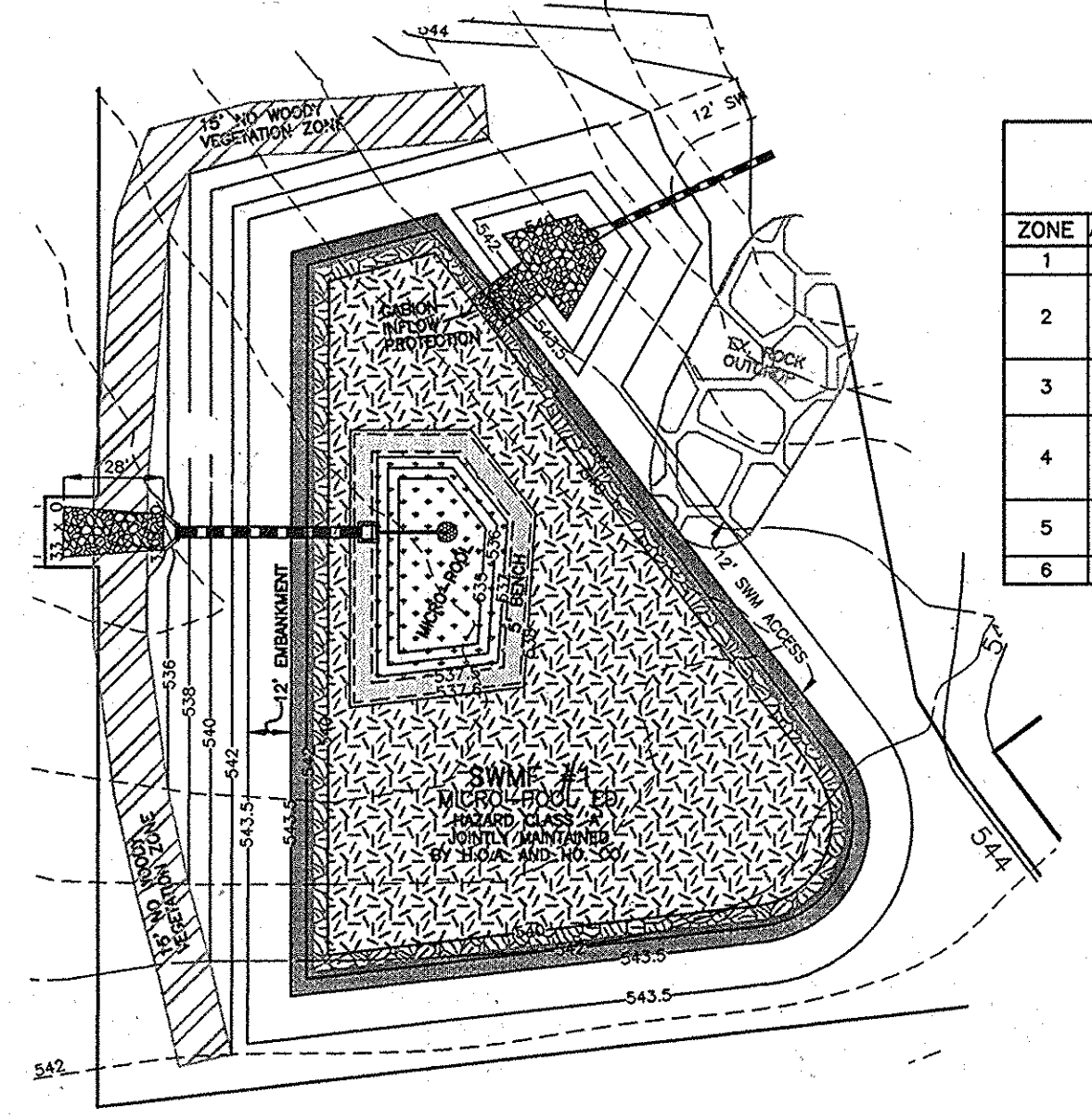
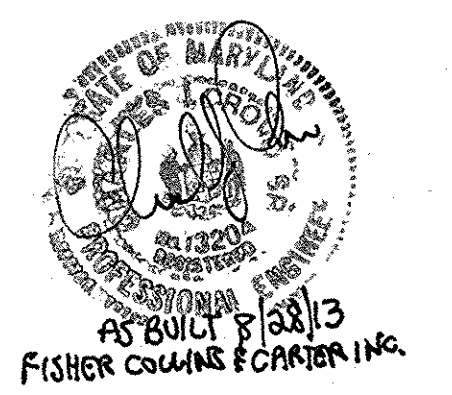
NOTE: ALL PLANTINGS TO BE QUART BULBS SPACED 3' O.C.



PLAN VIEW
SCALE: 1" = 50'

LEGEND

ZONE 1	[Pattern]
ZONE 2	[Pattern]
ZONE 3	[Pattern]
ZONE 4	[Pattern]
ZONE 5	[Pattern]



PLAN VIEW
SCALE: 1" = 50'

INTERNAL PLANTING SCHEDULE FOR EXTENDED DETENTION FACILITY #1

ZONE	AREA (SF)	ELEVATION RANGE	PLANT MIX	QUANTITIES
1	2,303	535.00 - 537.50	100% WATER LILLY	256
2	1,350	537.50 - 538.00	50% BROAD WATER WEED 25% DUCK POTATO 25% ARROW ARUM	75 38 38
3	14,345	538.00 - 540.00	50% CUTGRASS, RICE 50% SWITCHGRASS	787 787
4	2,247	540.00 - 541.47	50% LOVEGRASS-MEADOW 25% VIOLETS, COMMON BLUE 25% CONEFLOWER, CUT-LEAF	125 62 62
5	3,972	541.47 - 543.50	75% WITCHGRASS, NEEDLE-LEAF 25% CONEFLOWER, SWEET	331 110
6	0 SF	N/A	N/A	N/A

NOTE: ALL PLANTINGS TO BE QUART BULBS SPACED 3' O.C.

- NOTES:
- LOOSEN SOIL IN PLANTING ZONES TO A DEPTH OF THREE TO FIVE INCHES BEFORE PLANTING.
 - PLANTING HOLES TO HAVE A DIAMETER 6" GREATER THAN THE ROOT BALL BEING PLANTED IN THEM.
 - NO WOODY VEGETATION IS PERMITTED WITHIN 15' OF THE TOE OF SLOPE OR 25' OF THE SPILLWAY.

APPROVED: DEPARTMENT OF PUBLIC WORKS
William F. White 1-19-08
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cindy Howard 1/2/08
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

William J. Dammann 1/2/08
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

NO. DATE REVISION

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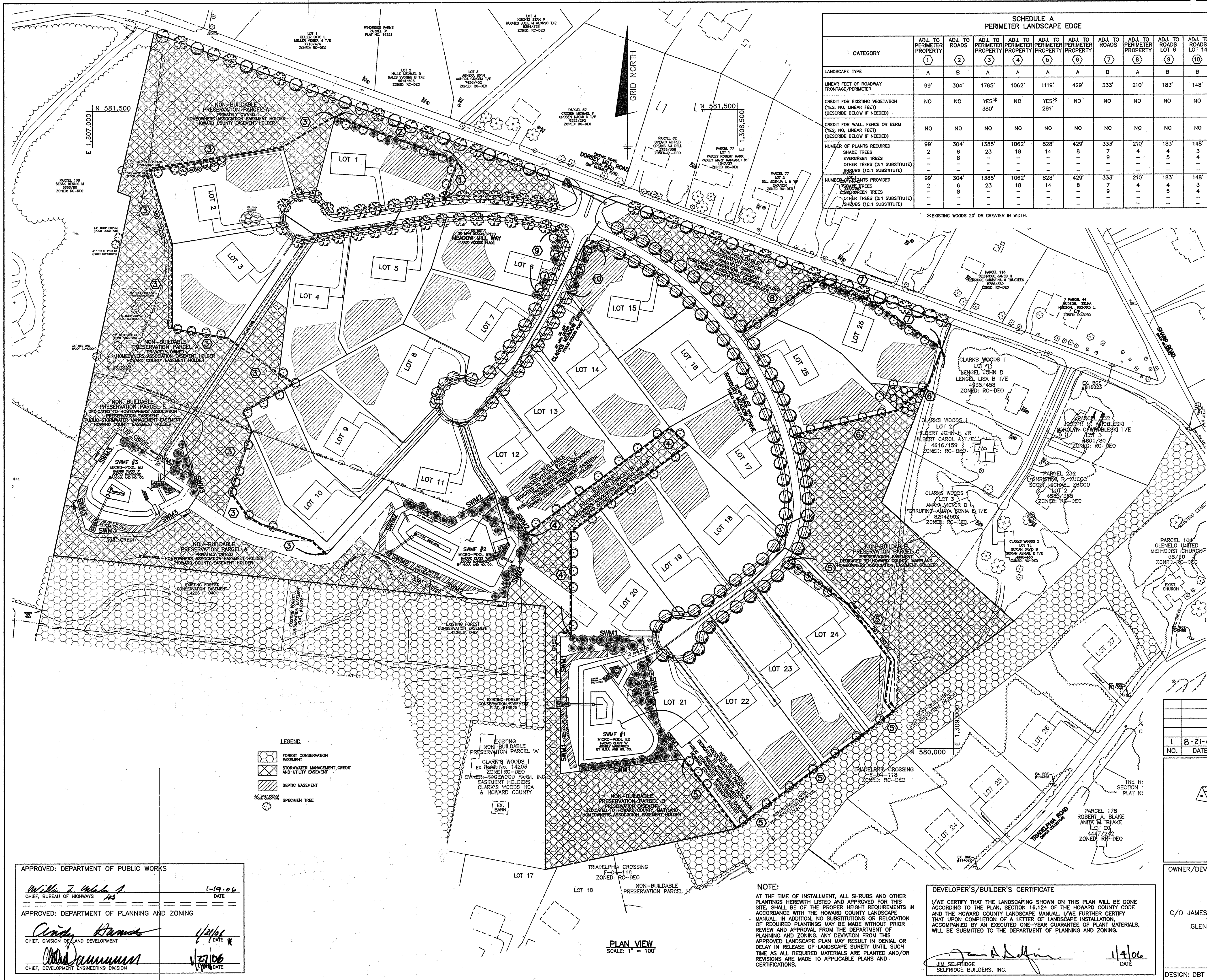
PROJECT: CLARKS MEADOW
 LOTS 1-26
 NON-BUILDABLE PRESERVATION PARCELS 'A' THRU 'G'
 FOREST MITIGATION BANK
 A RESUBDIVISION OF CLARKS WOODS I, LOT 4, PLAT NO. 14203

LOCATION: TAX MAP: 21 PARCEL: 227
 GRID: 17 ZONED: RC-DEO
 ELE. TION DISTRICT NO. 4
 HOWARD COUNTY, MARYLAND

TITLE: STORM DRAIN PROFILES AND SWMF LANDSCAPING

DATE: JANUARY, 2006 PROJECT NO. 1736
 DES: DBT/MCR DRAFT: DBT/MCR CHECK: DAM SCALE: AS SHOWN SHEET 12 OF 19

Donald M. Moore 12/23/08



SCHEDULE A PERIMETER LANDSCAPE EDGE

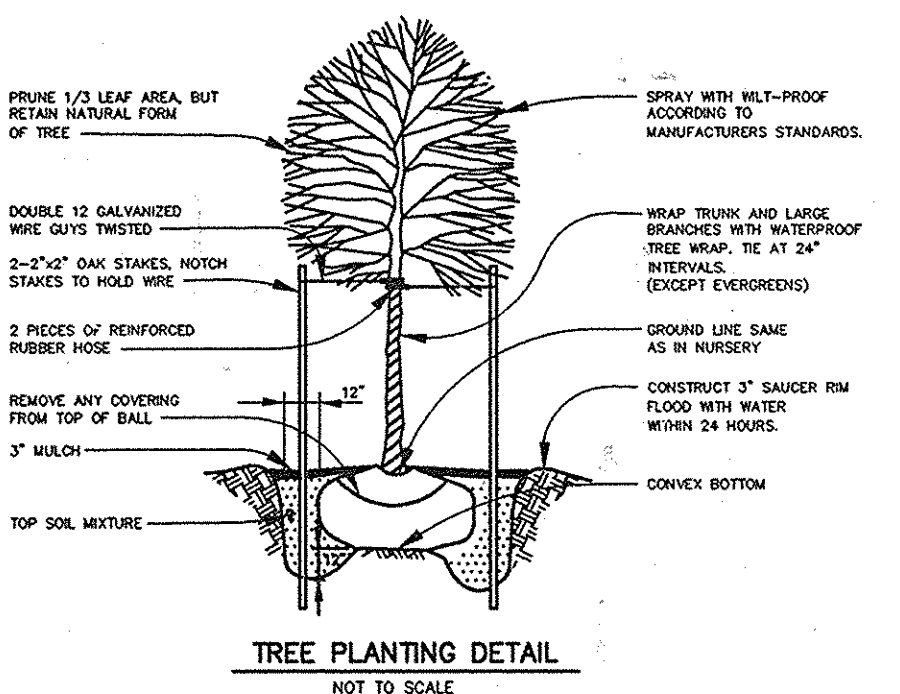
CATEGORY	ADJ. TO PERIMETER PROPERTY (1)	ADJ. TO ROADS (2)	ADJ. TO PERIMETER PROPERTY (3)	ADJ. TO PERIMETER PROPERTY (4)	ADJ. TO PERIMETER PROPERTY (5)	ADJ. TO PERIMETER PROPERTY (6)	ADJ. TO ROADS (7)	ADJ. TO PERIMETER PROPERTY (8)	ADJ. TO ROADS (9)	ADJ. TO ROADS LOT 14 (10)	TOTALS
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	99'	304'	1765'	1062'	1119'	429'	333'	210'	183'	148'	
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO	YES* 380'	NO	YES* 291'	NO	NO	NO	NO	NO	
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
NUMBER OF PLANTS REQUIRED	99	304	1385	1062	828	429	333	210	183	148	89
SHADE TREES	2	6	23	18	14	8	7	4	4	3	26
EVERGREEN TREES	2	6	23	18	14	8	7	4	4	3	26
OTHER TREES (2:1 SUBSTITUTE) (DESCRIBE BELOW IF NEEDED)	-	-	-	-	-	-	-	-	-	-	-
NUMBER OF PLANTS PROVIDED	99	304	1385	1062	828	429	333	210	183	148	89
SHADE TREES	2	6	23	18	14	8	7	4	4	3	26
EVERGREEN TREES	2	6	23	18	14	8	7	4	4	3	26
OTHER TREES (2:1 SUBSTITUTE) (DESCRIBE BELOW IF NEEDED)	-	-	-	-	-	-	-	-	-	-	-

SCHEDULE D SWM PERIMETER LANDSCAPING

LINEAR FEET OF PERIMETER (NO. YES AND %)	SWMF 1	SWMF 2	SWMF 3	TOTALS
CREDIT FOR EXISTING VEGETATION (NO, YES AND %)	YES, 10.9%	YES, 33.0%	YES, 63.7%	
CREDIT FOR OTHER LANDSCAPING (NO, YES AND %)	NO	NO	NO	
LINEAR FEET OF REQUIRED PLANTING	990'	681'	287'	
BUFFER TYPE	"B"	"B"	"B"	
NUMBER OF TREES REQUIRED	20	14	6	40
SHADE TREES	25	17	7	49
EVERGREEN TREES	20	14	6	40
SHADE TREES PROVIDED	20	14	6	40
EVERGREEN TREES PROVIDED	25	17	7	49

STREET TREE SCHEDULE

ROAD NAME	PERIMETER TREES REQ.	TREES PROV.
CLARKS MEADOW DRIVE	1137	29
ROXBURY MEADOW DRIVE	2687	68
MEADOW MILL WAY	1383	35
DORSEY MILL ROAD	1861	47
TOTALS	179	179



- LANDSCAPE NOTES:**
- TREES SHOULD BE PLANTED A MINIMUM OF 6 FEET FROM THE EDGE OF PAVING 5 FEET FROM ANY STORM DRAIN, 20 FEET FROM A STREET LIGHT AND OUTSIDE OF THE 6' PUBLIC STORM DRAIN AND UTILITY EASEMENT THAT RUNS PARALLEL TO THE RIGHT-OF-WAY.
 - TREES MUST BE PLANTED A MINIMUM OF 5 FEET FROM AN OPEN SPACE ACCESS STRIP AND 10 FEET FROM A DRIVEWAY.
 - SEE TREE PLANTING DETAIL - THIS SHEET.
 - THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL.
 - FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DPW DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$49,950.00. (\$38,700.00 FOR 129 SHADE TREES, \$11,250.00 FOR 75 EVERGREENS)

NOTE: LANDSCAPING FOR THIS SUBDIVISION IS PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL.

PUBLIC STREET TREE PLANTING LIST

SYMBOL	QUANTITY	NAME	REMARKS
(Symbol)	51	PLATANUS X ACERFOLIO 'BLOODGOOD' (Bloodgood London Plane)	2 1/2" MIN. CAL. FULL HEAD
(Symbol)	83	ACER RUBRUM 'OCTOBER GLORY' (October Glory Red Maple)	2 1/2" MIN. CAL. FULL HEAD
(Symbol)	45	ACER SACCHARUM 'GREEN MOUNTAIN' (Green Mountain Sugar Maple)	2 1/2" MIN. CAL. FULL HEAD

LANDSCAPE PLANTING LIST

SYMBOL	QUANTITY	NAME	REMARKS	DESCRIPTION
(Symbol)	89	QUERCUS RUBRA (Red Oak)	2-1/2" - 3" cal.	SHADE TREES ALONG PERIMETER TO BE PROVIDED BY THE DEVELOPER
(Symbol)	75	PINUS STROBUS (Eastern White Pine)	6' - 8' h.t.	EVERGREEN TREES ALONG PERIMETER AND SWM FACILITIES TO BE PROVIDED BY THE DEVELOPER
(Symbol)	40	TILIA CORDATA 'GREENSPRING' (Greenspring Littleleaf Linden)	2-1/2" - 3" cal.	SHADE TREES ALONG SWM FACILITIES TO BE PROVIDED BY THE DEVELOPER

APPROVED: DEPARTMENT OF PUBLIC WORKS
William J. Mahan, Jr. 1-19-06
 CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Claudia R. Harms 1/19/06
 CHIEF, DIVISION OF LAND DEVELOPMENT

Michael J. ... 1/19/06
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

NOTE: AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTINGS HEREWITH LISTED AND APPROVED FOR THIS SITE, SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATION OF REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THIS APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATIONS.

DEVELOPER'S/BUILDER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION OF A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE-YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

Jim Selfridge 1/19/06
 JIM SELFTRIDGE
 SELFTRIDGE BUILDERS, INC.

NO.	DATE	REVISION
1	8-21-06	REVISE FCE #2 & 5, SEPTIC ESMTS. ON LOTS 23 & 24 AND REDIGIT DRAINAGE ESMT. OFF FLAGSTEM OF LOT 11.

BENCHMARK ENGINEERING, INC.
 ENGINEERS • LAND SURVEYORS • PLANNERS

Donald Maas 12/23/05

8480 BALTIMORE NATIONAL PIKE & SUITE 418
 ELICOTT CITY, MARYLAND 21043
 phone: 410-465-6105 • fax: 410-465-6644
 www.bel-civilengineering.com

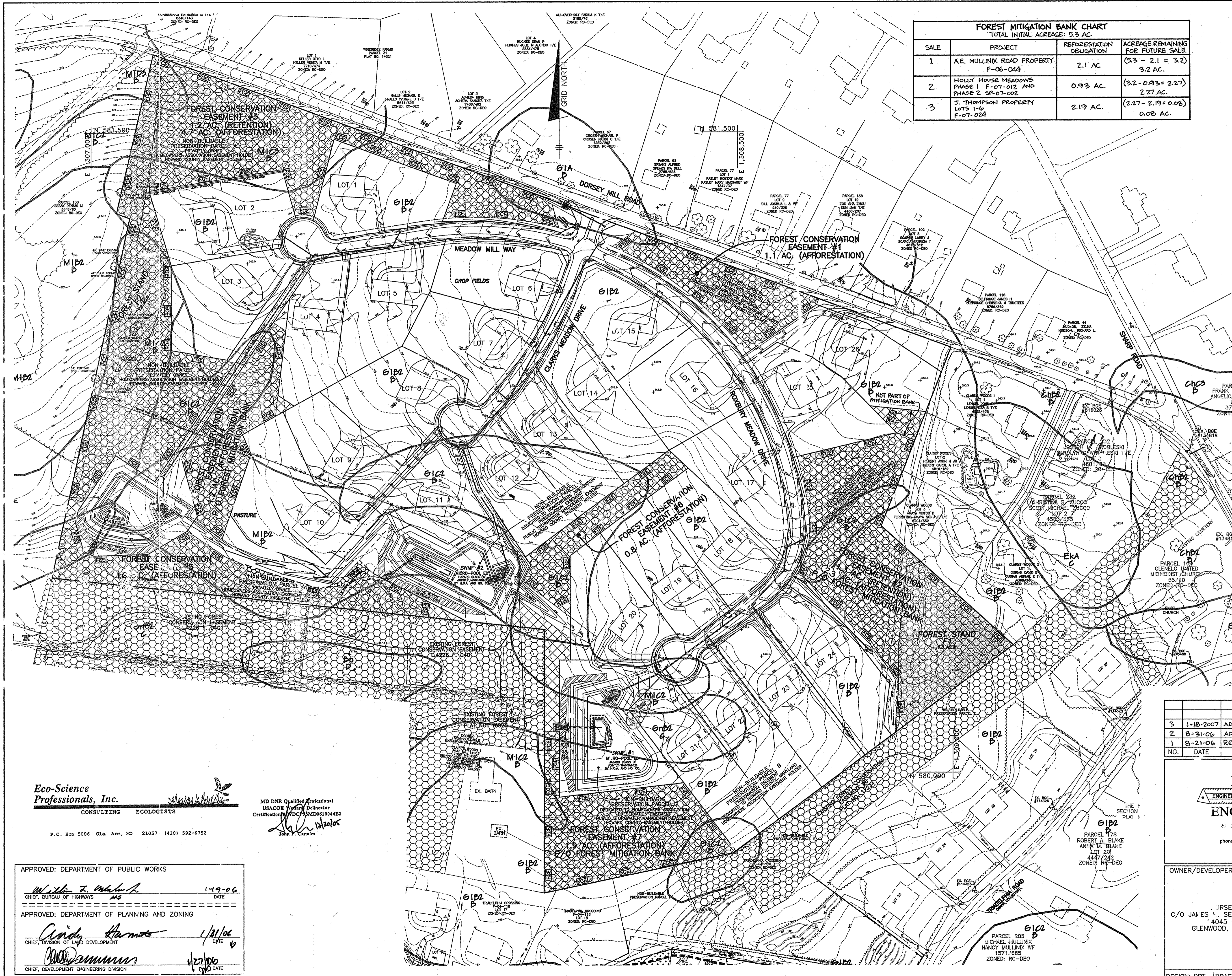
OWNER/DEVELOPER: DORSEY MILL, LLC
 C/O JAMES H. SELFTRIDGE BUILDERS, INC.
 14045 GARED DRIVE
 GLENWOOD, MARYLAND 21738

PROJECT: CLARKS MEADOW
 LOTS 1-26
 NON-BUILDABLE PRESERVATION PARCELS 'A' THRU 'G'
 FOREST MITIGATION BANK
 A RESUBDIVISION OF CLARKS WOODS I, LOT 4, PLAT NO. 14203

LOCATION: TAX MAP: 21 PARCEL: 227
 GRID: 17 ZONED: RC-DEC
 ELECTION DISTRICT NO. HOWARD COUNTY, MARYLAND

TITLE: LANDSCAPE PLAN

DATE: JANUARY, 2006 PROJECT NO. 1736
 SCALE: 1" = 100' SHEET 13 OF 19



FOREST MITIGATION BANK CHART TOTAL INITIAL ACREAGE: 5.3 AC.			
SALE	PROJECT	REFORESTATION OBLIGATION	ACREAGE REMAINING FOR FUTURE SALE
1	A.E. MULLINX ROAD PROPERTY F-06-044	2.1 AC.	(5.3 - 2.1 = 3.2) 3.2 AC.
2	HOLLY HOOSE MEADOWS PHASE 1 F-07-012 AND PHASE 2 SP-07-002	0.93 AC.	(3.2 - 0.93 = 2.27) 2.27 AC.
3	J. THOMPSON PROPERTY LOTS 1-6 F-07-024	2.19 AC.	(2.27 - 2.19 = 0.08) 0.08 AC.

SOILS LEGEND	
MAP SYMBOL SOIL GROUP	SOIL TYPE
* B ₀	D BALE SILT LOAM
CHB2	C CHESTER SILT LOAM, 3 TO 8 % SLOPES, MODERATELY ERODED
EKA	C ELDOAK SILT LOAM, 0 TO 3 % SLOPES
GA	B GLENELG LOAM, 0 TO 3 PERCENT SLOPES
GIB2	B GLENELG LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED
GIC2	B GLENELG LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED
* G ₀ B2	C GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED
MIB2	B MANOR LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED
MIC2	B MANOR LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED
MIC3	B MANOR LOAM, 8 TO 15 PERCENT SLOPES, SEVERELY ERODED
MID3	B MANOR LOAM 15 TO 25 PERCENT SLOPES, SEVERELY ERODED

* INDICATES HYDRIC SOILS
TAKEN FROM SOILS SURVEY, ISSUED JULY 1968, MAP NO. 17 and 13

LEGEND	
	FOREST CONSERVATION EASEMENT
	FOREST CONSERVATION RETENTION AREA
	FOREST CONSERVATION SIGNAGE
	SOIL DELINEATION LINE
	SOILS TYPE
	SPECIMEN TREE
	SWM CREDIT & UTILITY EASEMENT

FCE ACREAGE CHART			
EASEMENT	RETENTION	REFORESTATION	TOTAL
1	-	1.1 AC.	1.1 AC.
2	1.3 AC.	*2.3 AC.	*3.6 AC.
3	1.2 AC.	4.7 AC.	5.9 AC.
4	-	*1.2 AC.	*1.2 AC.
5	-	1.6 AC.	1.6 AC.
6	-	0.8 AC.	0.8 AC.
7	-	*1.9 AC.	*1.9 AC.
TOTALS	2.5 AC.	13.6 AC.	16.1 AC.

* FOREST MITIGATION EASEMENTS FOR BANK (5.3 AC.)
(ONLY 2.2 ACERS IN FCE #2 IS FOR BANK. 0.1 ACERS IS FOR SITE OBLIGATION.)

FOR BEARINGS AND DISTANCES - THE FOREST CONSERVATION EASEMENTS SET RECORDED PLAT.

NOTE:
THE SALE OF FOREST CREDIT MAY BEGIN UPON ACCEPTANCE BY THE COUNTY OF THE PROFESSIONAL CERTIFICATION AND VERIFICATION OF THE AFFORESTATION PLANTING AND INSTALLATION OF REQUIRED PROTECTION MEASURES, SIGNATURE APPROVAL OF THE FOREST CONSERVATION PLAN, EXECUTION OF THE LEGAL DOCUMENTS PROCESSED UNDER THE DEVELOPER'S AGREEMENT, POSTING OF THE REQUIRED FINANCIAL SURETY AND RECORDATION OF THE FINAL PLAT ESTABLISHING THE FOREST CONSERVATION EASEMENTS.

NO.	DATE	REVISION
3	1-10-2007	ADD SALE #2 AND #3 TO FOREST MITIGATION BANK CHART.
2	8-31-06	ADD FOREST MITIGATION BANK CHART AND SALE FOR F-06-44
1	8-21-06	REVISE LIMIT AREAS OF FCE'S # 2 & 5

BENCHMARK
ENGINEERS • LAND SURVEYORS • PLANNERS
ENGINEERING, INC.

E J BALTIMORE NATIONAL PIKE & SUITE 418
ELLCOTT CITY, MARYLAND 21043
PHONE: 410-465-6105 • FAX: 410-465-6944
WWW.BEI-CV-ENGINEERING.COM

Donald Moon
12/23/06

OWNER/DEVELOPER:	PROJECT:
C/O JAMES L. SELFRIDGE BUILDERS, INC. 14045 GARED DRIVE CLENWOOD, MARYLAND 21738	CLARKS MEADOW LOTS 1-26 FOREST MITIGATION BANK A RESUBDIVISION OF CLARKS WOODS I, LOT 4, PLA. NO. 1420.
TITLE:	LOCATION:
FOREST CONSERVATION PLAN AND FOREST MITIGATION BANK	TAX MAP: 21 PARCEL: 227 GRID: 17 ZONED: RC-DEO ELECTION DISTRICT NO. 4 HOWARD COUNTY, MARYLAND
DATE:	PROJECT NO.
JANUARY, 2006	1736
DESIGN: DBT	DRAFT: DBT
CHECK: CAM	SCALE: 1" = 100'
SHEET 14	OF 19

Eco-Science Professionals, Inc.
CONSULTING ECOLOGISTS

MD DNR Qualified Professional
USACOE Wetland Delineator
Certification # FDCP#MD061004403

John F. Canoles
12/23/06

P.O. Box 5006 Glen Arm, MD 21057 (410) 592-6752

APPROVED: DEPARTMENT OF PUBLIC WORKS

William T. Mahan 1/9/06
CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Clayton Harms 1/31/06
CHIEF, DIVISION OF LAND DEVELOPMENT

Michael J. ... 1/27/06
CHIEF, DEVELOPMENT ENGINEERING DIVISION

FCE #1 - 1.1 acres

Table with 5 columns: Qty, Species, Size, Spacing, Total Units. Lists various tree species and quantities for FCE #1.

FCE #2 - 2.3 acres

Table with 5 columns: Qty, Species, Size, Spacing, Total Units. Lists various tree species and quantities for FCE #2.

FCE #5 - 1.6 acres

Table with 5 columns: Qty, Species, Size, Spacing, Total Units. Lists various tree species and quantities for FCE #5.

FCE #6 - 0.8 acres

Table with 5 columns: Qty, Species, Size, Spacing, Total Units. Lists various tree species and quantities for FCE #6.

FCE #3 - 4.7 acres

Table with 5 columns: Qty, Species, Size, Spacing, Total Units. Lists various tree species and quantities for FCE #3.

FCE #4 - 1.2 acres

Table with 5 columns: Qty, Species, Size, Spacing, Total Units. Lists various tree species and quantities for FCE #4.

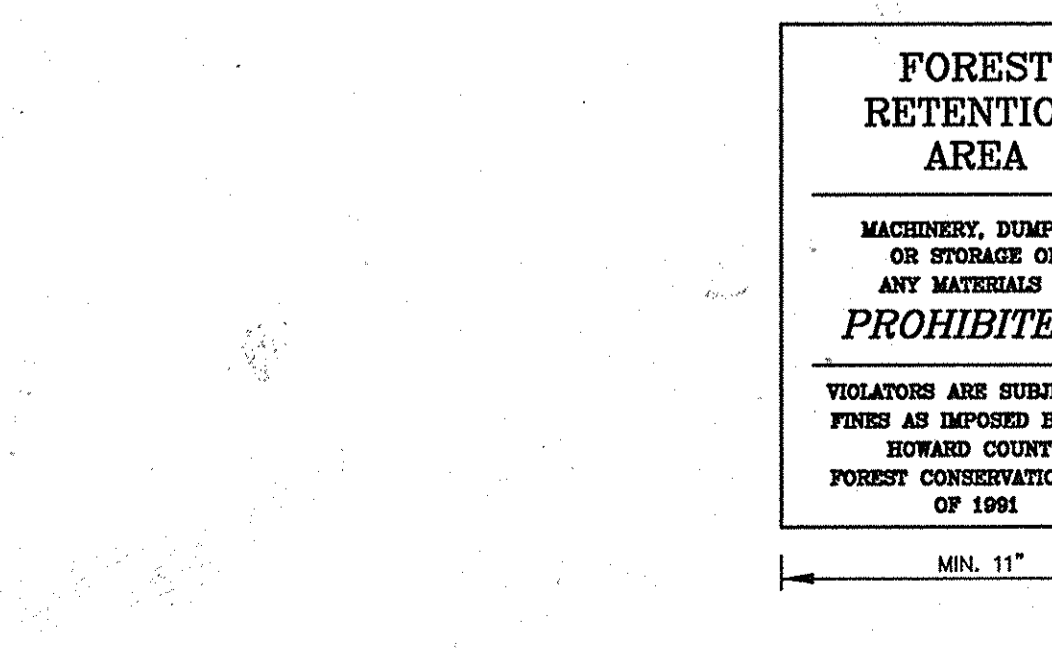
FCE #7 - 1.9 acres

Table with 5 columns: Qty, Species, Size, Spacing, Total Units. Lists various tree species and quantities for FCE #7.

Planting Notes:

1" caliper trees = 3.5 planting units, whips with shelter = 2 planting units
Planting should be staggered along the outer perimeter of the planting areas adjacent to existing or proposed residential developments.

Table titled 'PLANTING DENSITIES' showing tree counts for different species and spacing requirements.



FCE #8 - 1.2 acres

Table with 5 columns: Qty, Species, Size, Spacing, Total Units. Lists various tree species and quantities for FCE #8.

FCE #9 - 1.2 acres

Table with 5 columns: Qty, Species, Size, Spacing, Total Units. Lists various tree species and quantities for FCE #9.

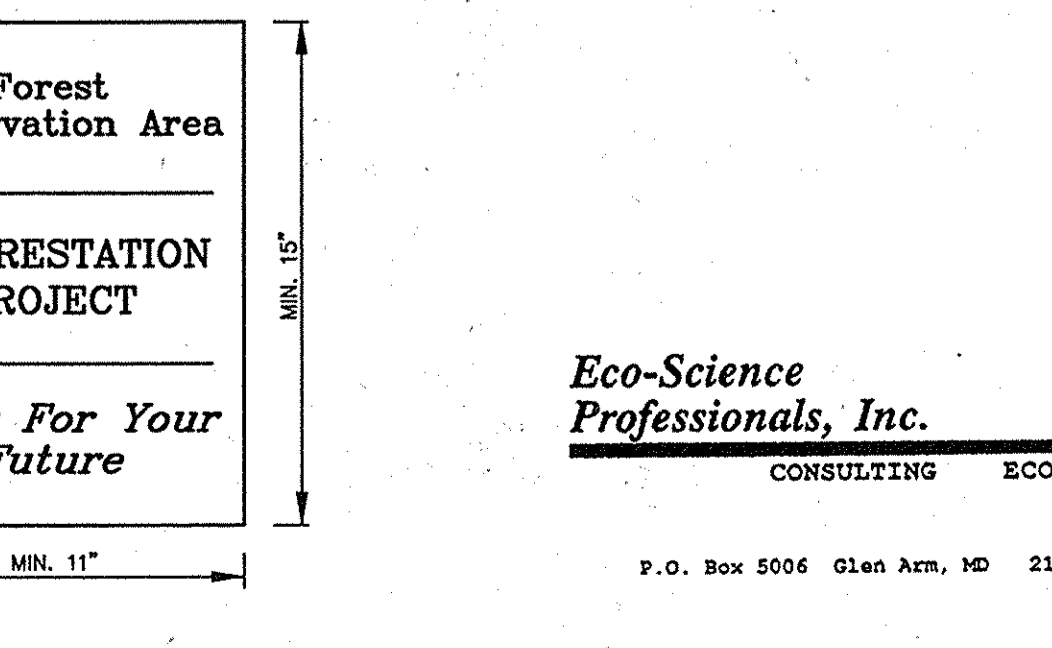
FCE #10 - 1.6 acres

Table with 5 columns: Qty, Species, Size, Spacing, Total Units. Lists various tree species and quantities for FCE #10.

Planting Notes:

1" caliper trees = 3.5 planting units, whips with shelter = 2 planting units
Planting should be made in a curvilinear fashion along contour.

Table titled 'PLANTING DENSITIES' showing tree counts for different species and spacing requirements.



APPENDIX G FOREST CONSERVATION WORKSHEET

NOTE: THIS SUBDIVISION PLAN IS USING "RURAL CLUSTER OPTION B" OF THE APPENDIX K OF THE FOREST CONSERVATION MANUAL BY INCLUDING THE ENTIRE SITE AREA IN THE CALCULATIONS TO SATISFY ITS FOREST CONSERVATION REQUIREMENT.

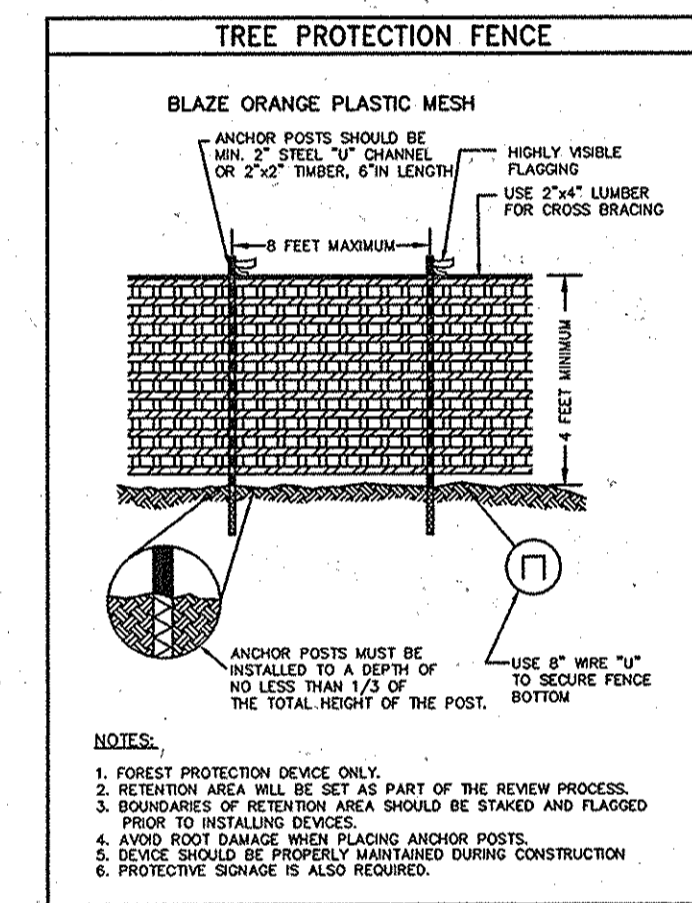
Table for 'BASIC SITE' calculations showing Gross Site Area, Area Within 100 Year Floodplain, etc.

Table for 'INFORMATION FOR CALCULATIONS' showing Net Tract Area, Reafforestation Threshold, etc.

Table for 'AFFORESTATION CALCULATIONS' showing Net Tract Area, Afforestation Minimum, etc.

FOREST CONSERVATION NOTES:

- 1. ANY FOREST CONSERVATION EASEMENT (FCE) AREA SHOWN HEREON IS SUBJECT TO PROTECTIVE COVENANTS WHICH MAY BE FOUND IN THE LAND RECORDS OF HOWARD COUNTY WHICH RESTRICT THE DISTURBANCE AND USE OF THESE AREAS.
2. THE FOREST CONSERVATION EASEMENTS HAVE BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE.

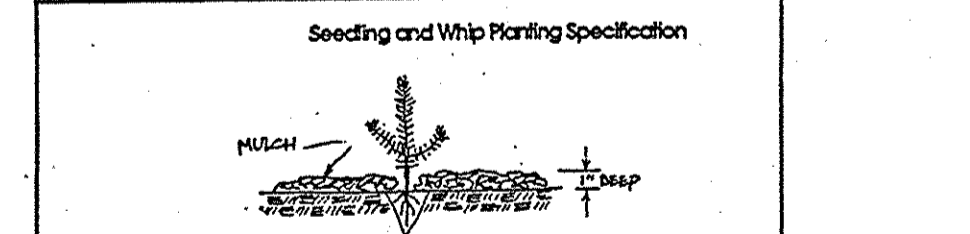


PLANTING/SOIL SPECIFICATIONS

- 1. PLANTING OF NURSERY STOCK SHALL TAKE PLACE BETWEEN MARCH 1ST AND APRIL 30TH. CONTAINER STOCK MAY BE PLANTED BETWEEN SEPTEMBER 1ST AND OCTOBER 30TH.
2. TWELVE (12) INCH LAYERS OF TOPSOIL SHALL BE SPREAD OVER ALL REFORESTATION AREAS IMPACTED BY SITE GRADING TO ASSURE A SUITABLE PLANTING AREA.

MULTIFLORA ROSE CONTROL NOTE

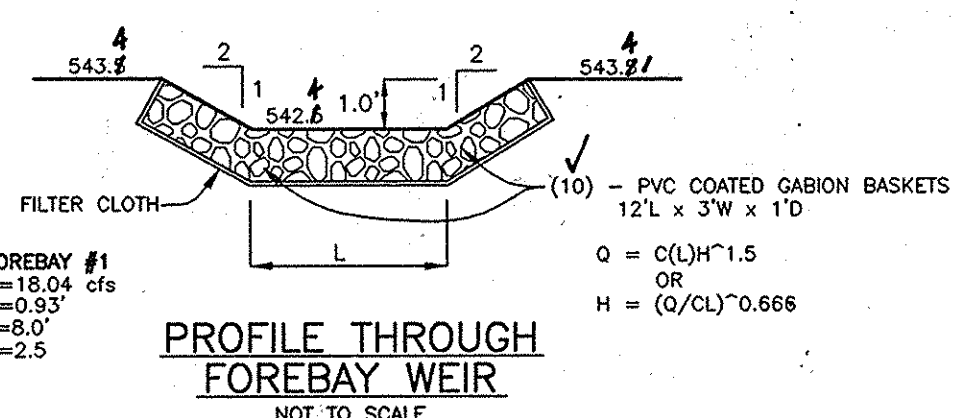
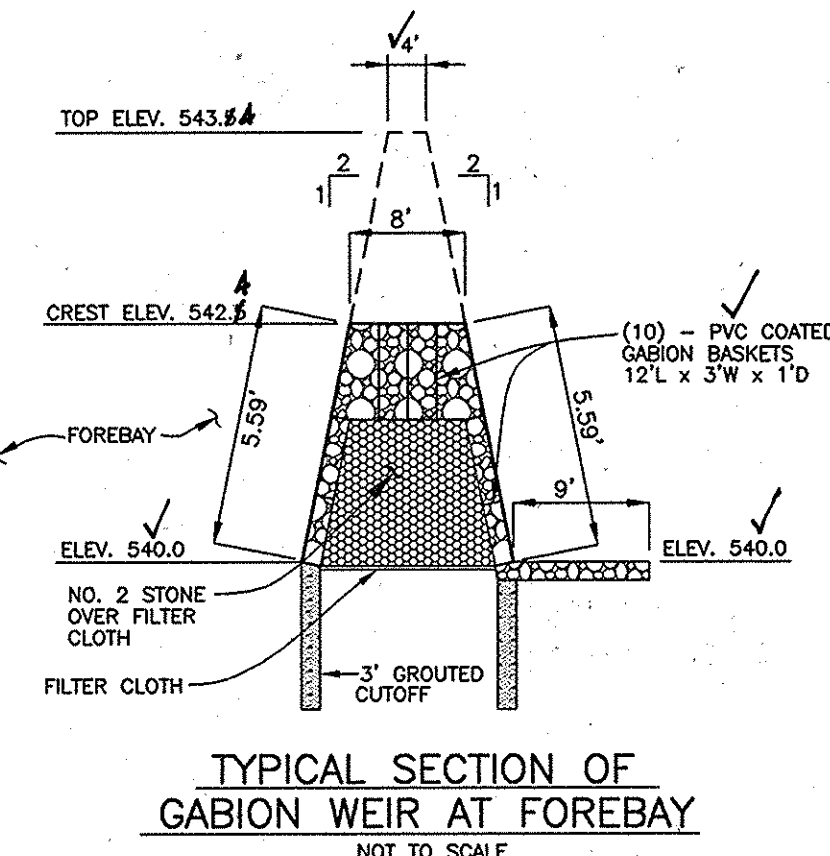
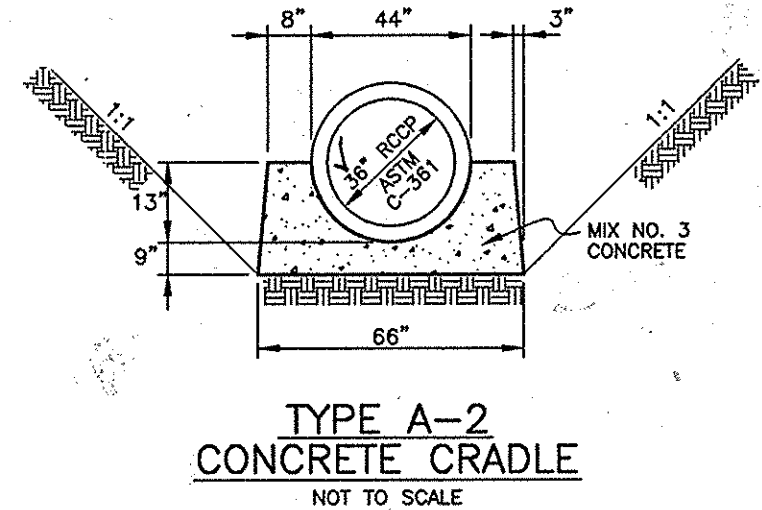
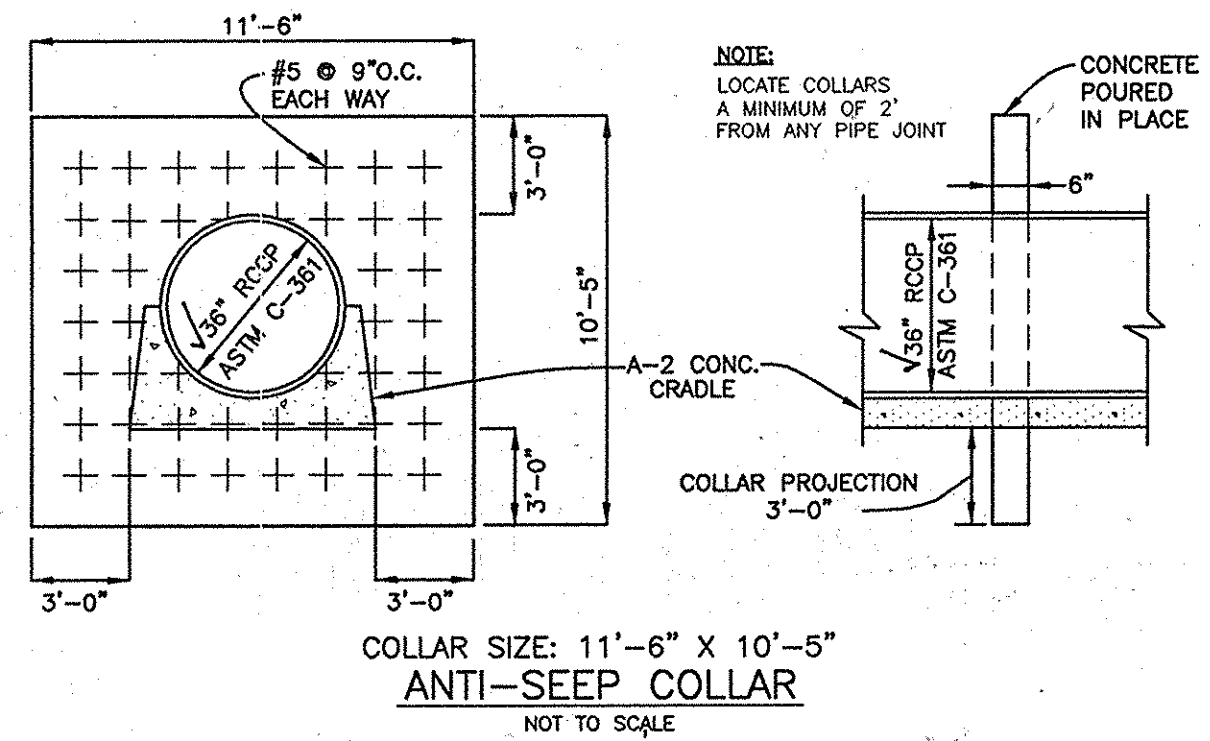
MULTIFLORA ROSE IS PREVALENT IN CERTAIN AREAS TO BE AFFORESTED. PRIOR TO PLANTING ALL MULTIFLORA ROSE SHOULD BE REMOVED. REMOVAL OF THE ROSE MAY BE PERFORMED WITH MOWING AND HERBICIDE TREATMENTS.



APPROVED: DEPARTMENT OF PUBLIC WORKS
Wilton J. Mahle, Jr., Chief, Bureau of Highways
APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cindy Korman, Chief, Division of Land Development

BENCHMARK ENGINEERING, INC. logo and contact information including address, phone, and website.

OWNER/DEVELOPER: DORSEY MILL, LLC
PROJECT: CLARKS MEADOW LOTS 1-26
LOCATION: C/O JAMES H. SELFDRIDGE BUILDERS, INC.



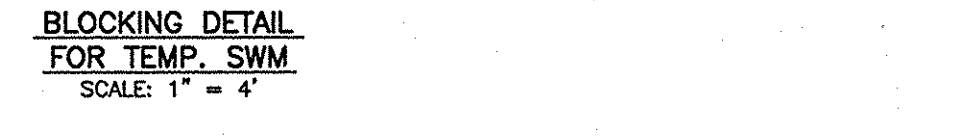
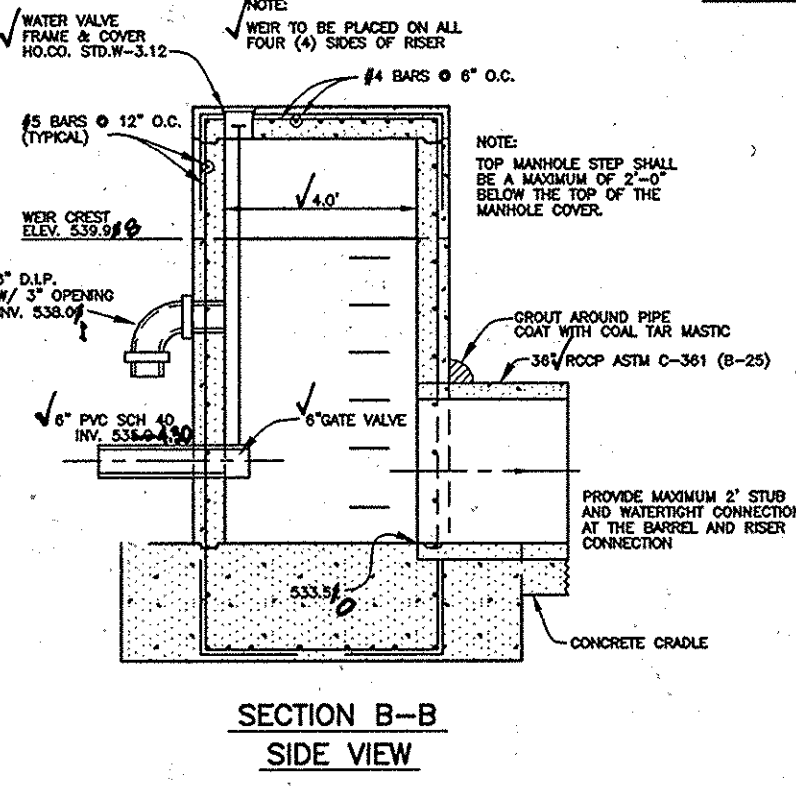
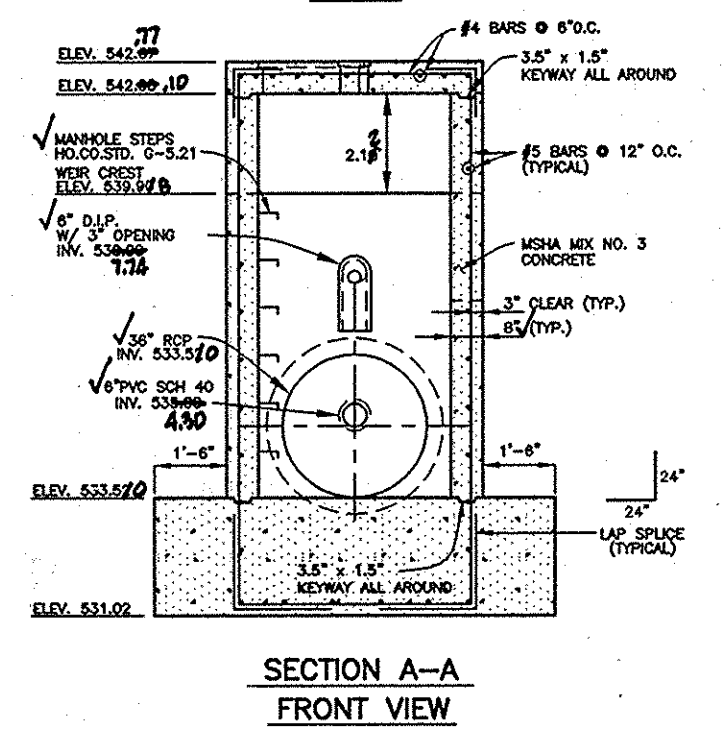
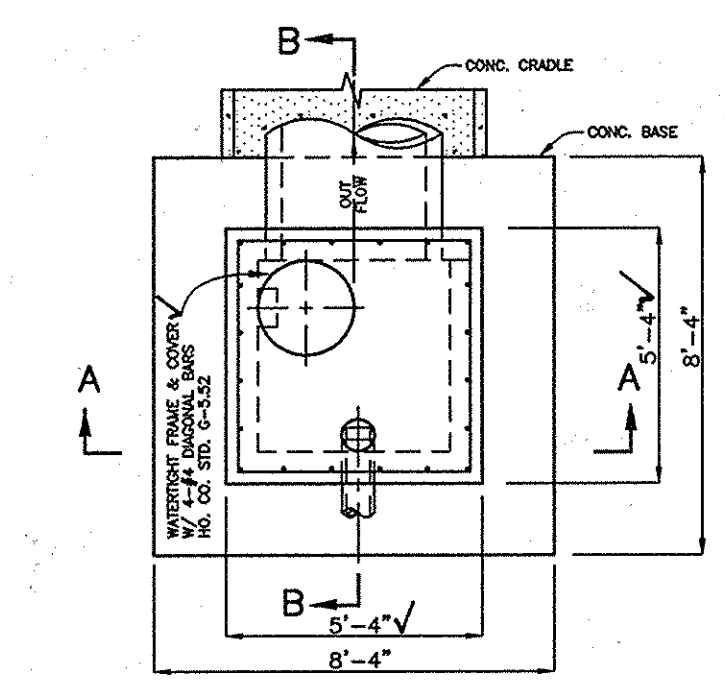
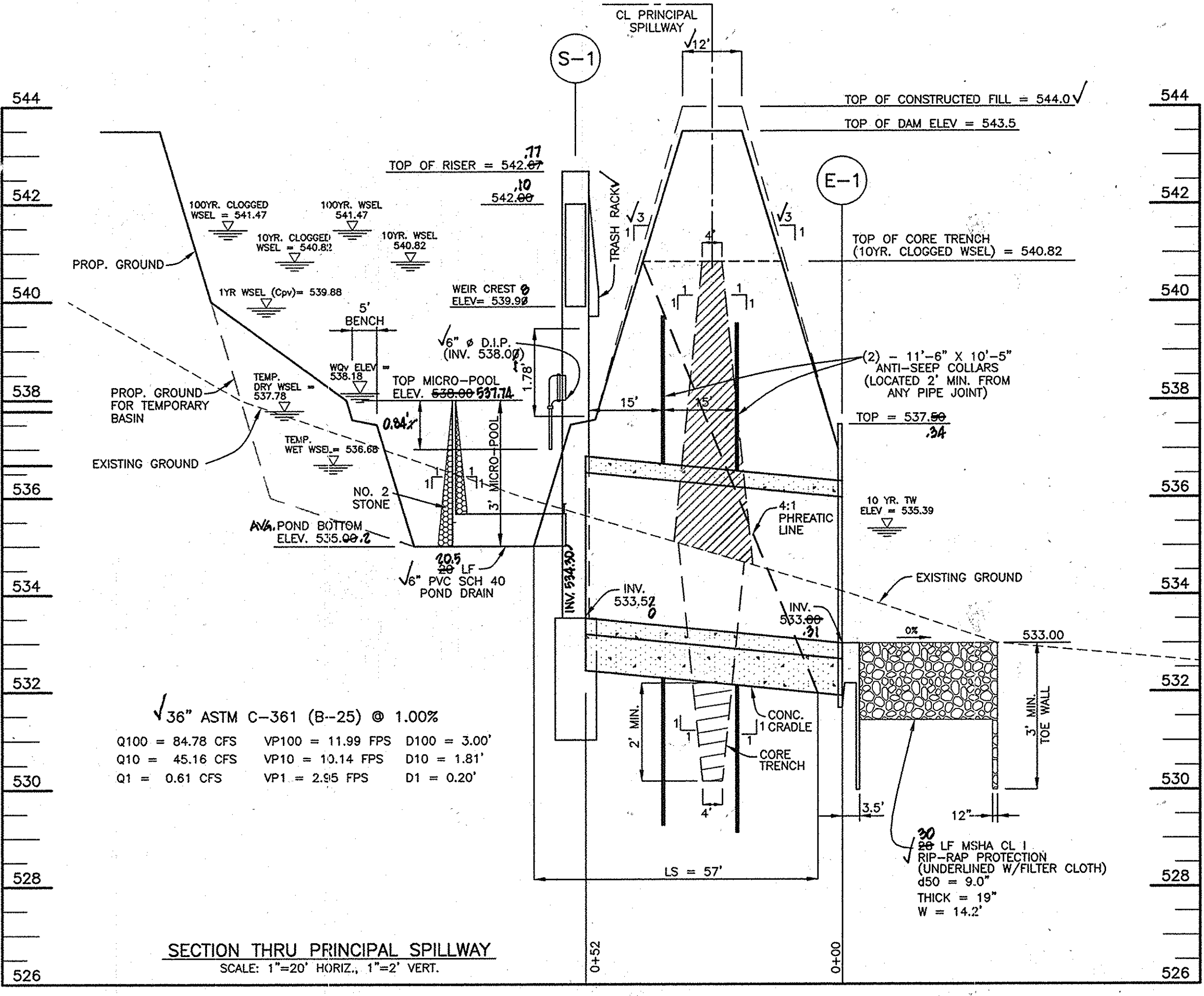
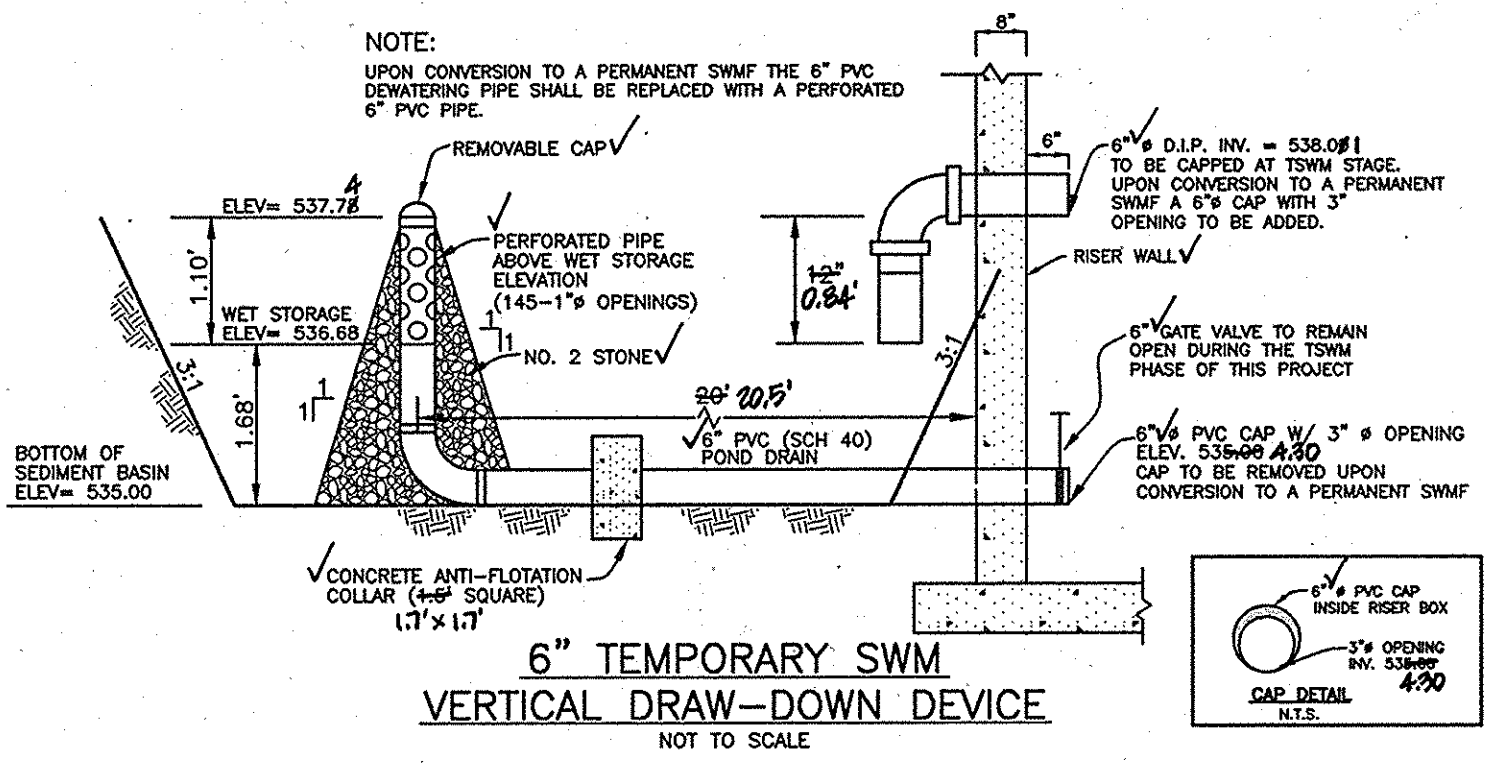
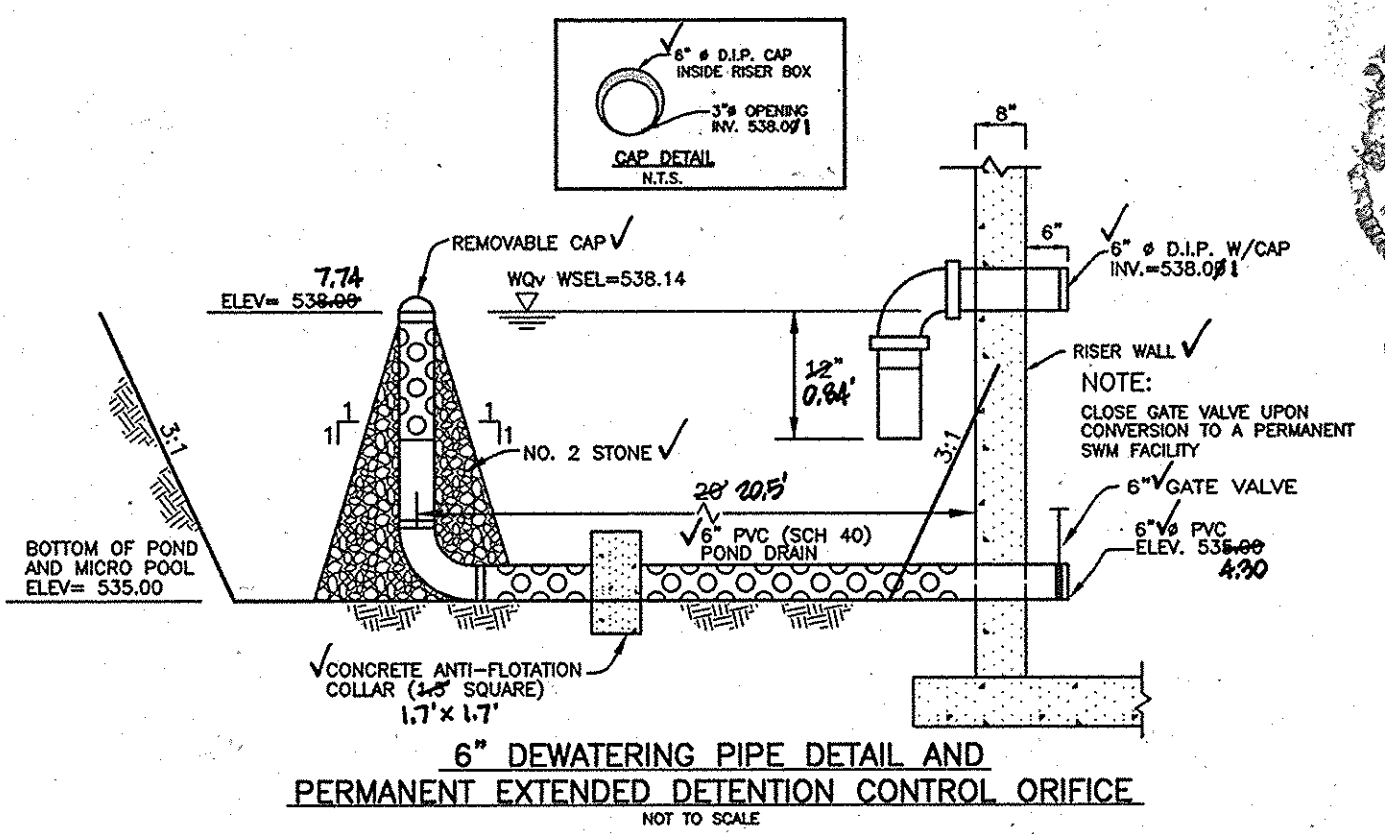
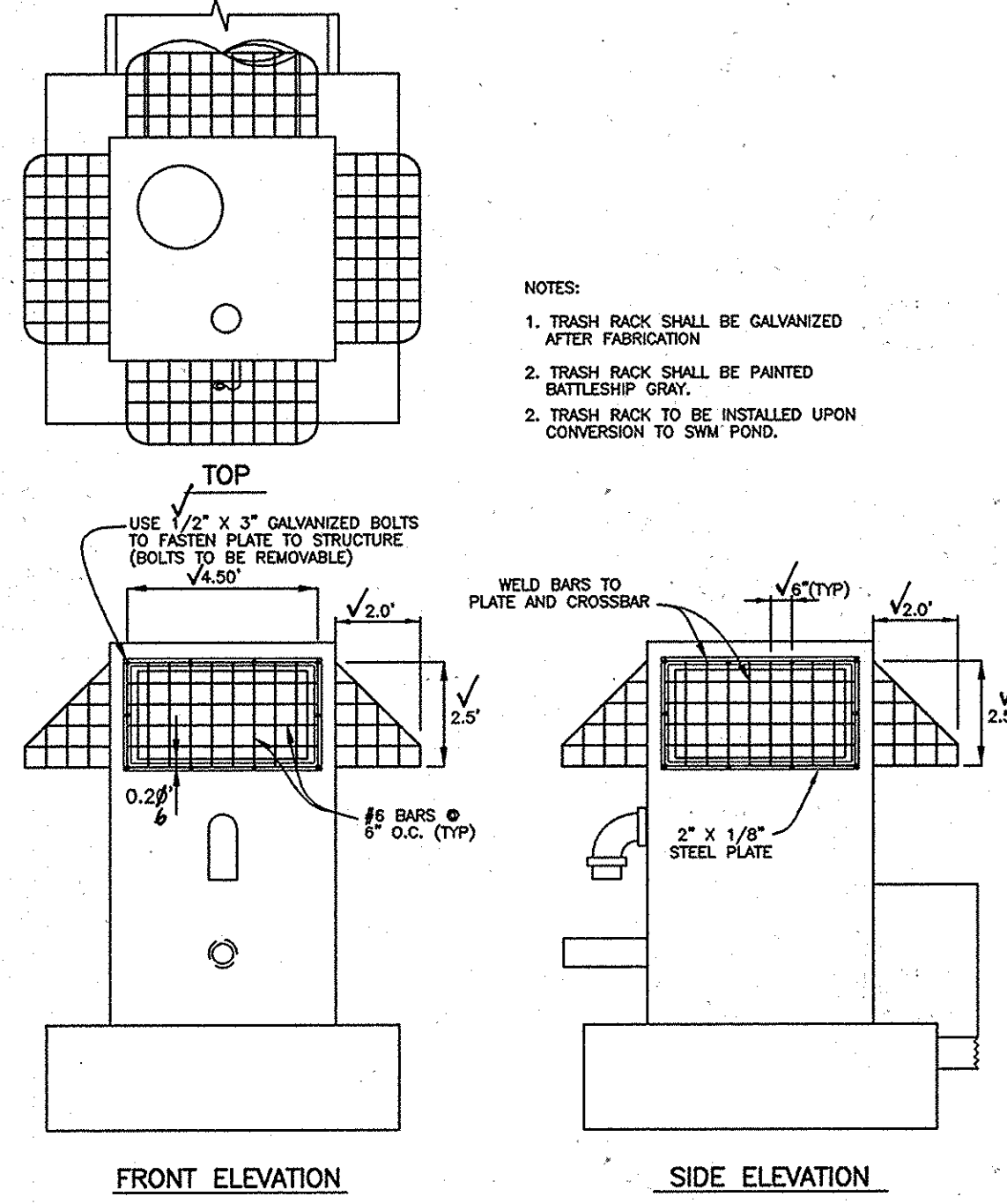
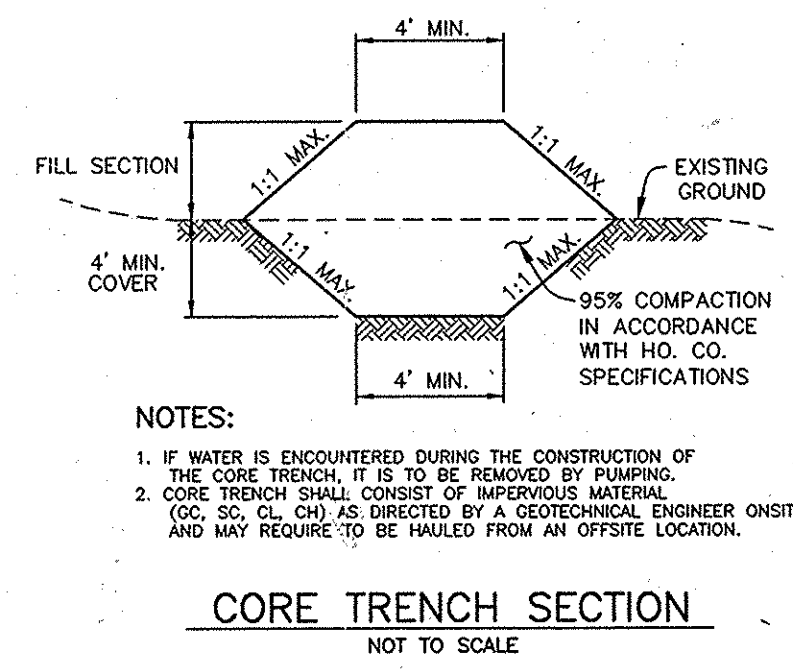
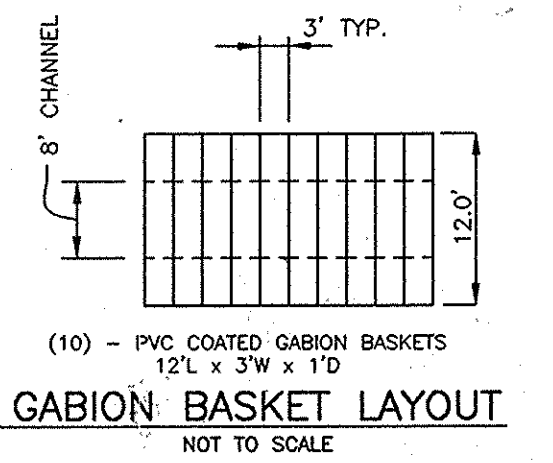
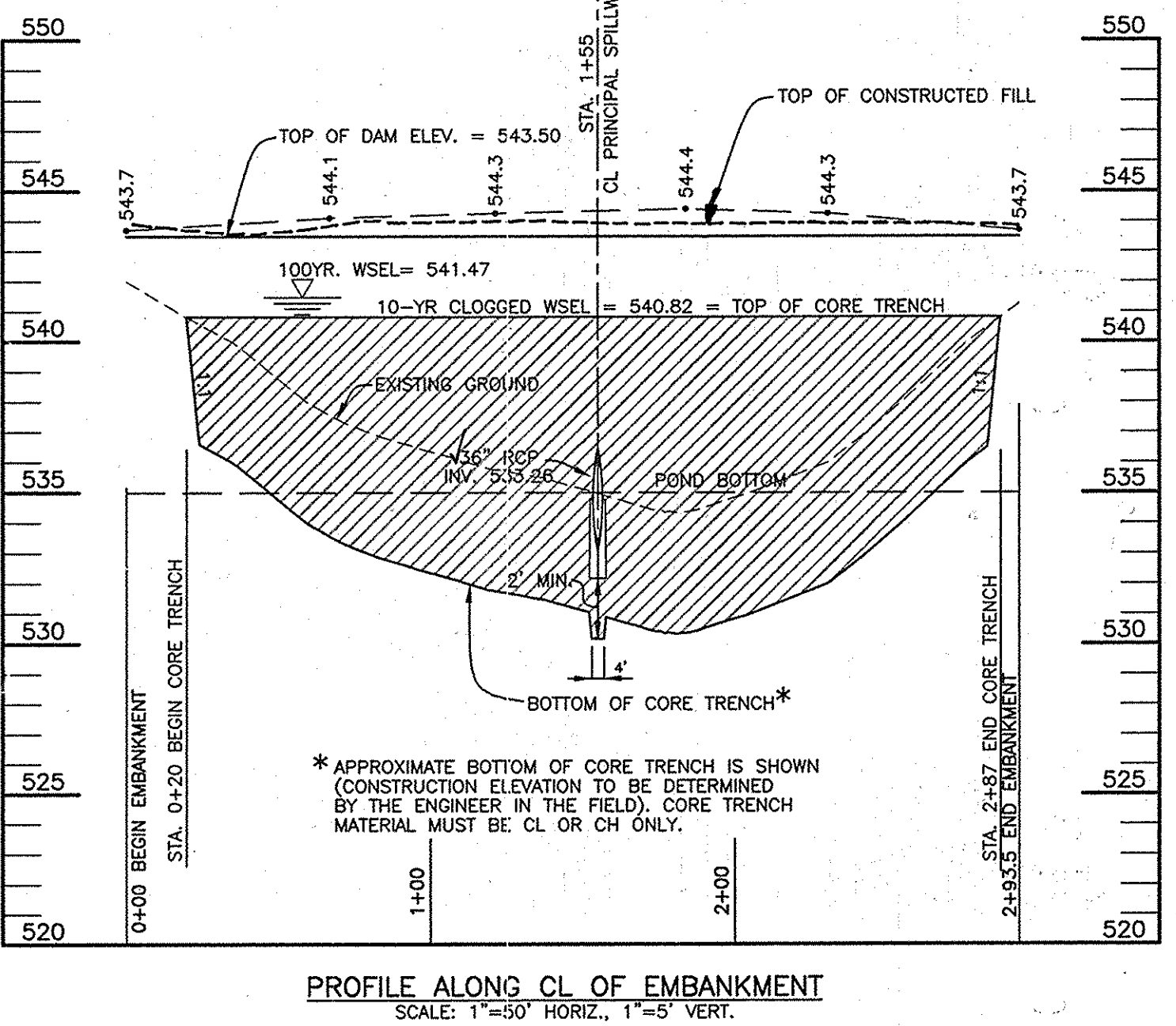
GEOTECHNICAL ENGINEER RECOMMENDATIONS:

EMBANKMENT AND CUT-OFF TRENCH CONSTRUCTION

THE AREAS OF THE PROPOSED SWM FACILITIES SHOULD BE STRIPPED OF TOPSOIL AND ANY OTHER UNSUITABLE MATERIALS FROM THE EMBANKMENT OR STRUCTURE AREAS IN ACCORDANCE WITH SOIL CONSERVATION GUIDELINES. AFTER STRIPPING OPERATIONS HAVE BEEN COMPLETED, THE EXPOSED SUBGRADE MATERIALS SHOULD BE PROFFEROLLED WITH A LOADED DUMP TRUCK OR SIMILAR EQUIPMENT IN THE PRESENCE OF A GEOTECHNICAL ENGINEER OR HIS REPRESENTATIVE. FOR AREAS THAT ARE NOT ACCESSIBLE TO A DUMP TRUCK, THE EXPOSED MATERIALS SHOULD BE OBSERVED AND TESTED BY A GEOTECHNICAL ENGINEER OR HIS REPRESENTATIVE UTILIZING A DYNAMIC CONE PENETROMETER. ANY EXCESSIVELY SOFT OR LOOSE MATERIALS IDENTIFIED BY PROFFEROLLED OR PENETROMETER TESTING SHOULD BE EXCAVATED TO SUITABLE FIRM SOIL, AND THEN GRADES RE-ESTABLISHED BY BACKFILLING WITH SUITABLE SOIL.

A REPRESENTATIVE OF THE GEOTECHNICAL ENGINEER SHOULD BE PRESENT TO MONITOR PLACEMENT AND COMPACTION OF FILL FOR THE EMBANKMENT AND CUT-OFF TRENCH. IN ACCORDANCE WITH NRCS-MD CODE NO. 378 POND STANDARDS/SPECIFICATIONS, SOILS CONSIDERED SUITABLE FOR THE CENTER OF EMBANKMENT AND CUTOFF TRENCH SHALL CONFORM TO UNIFIED SOIL CLASSIFICATION GC, SC, CH, OR CL AND MUST HAVE AT LEAST 30% PASSING THE #200 SIEVE.

IT IS OUR PROFESSIONAL OPINION THAT IN ADDITION TO THE SOIL MATERIALS DESCRIBED ABOVE, A FINE-GRAINED SOIL, INCLUDING SILT(ML) WITH A PLASTICITY INDEX OF 10 OR MORE CAN BE UTILIZED FOR THE CENTER OF THE EMBANKMENT AND CORE TRENCH. ALL FILL MATERIALS MUST BE PLACED AND COMPACTION IN ACCORDANCE WITH NRCS-MD CODE NO. 378 SPECIFICATIONS.



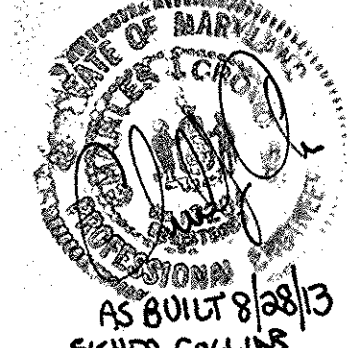
OPERATION AND MAINTENANCE SCHEDULE FOR JOINTLY MAINTAINED EXTENDED DETENTION POND

ROUTINE MAINTENANCE TO BE PERFORMED BY H.O.A.:

- FACILITY SHALL BE INSPECTED ANNUALLY AND AFTER MAJOR STORMS. INSPECTIONS SHALL BE PERFORMED DURING WET WEATHER TO DETERMINE IF THE POND IS FUNCTIONING PROPERLY.
- TOP AND SIDE SLOPES OF THE EMBANKMENT SHALL BE MOWED A MINIMUM OF TWO (2) TIMES PER YEAR, ONCE IN JUNE AND ONCE IN SEPTEMBER. OTHER SIDE SLOPES AND MAINTENANCE ACCESS SHALL BE MOWED AS NEEDED.
- DEBRIS AND LITTER SHALL BE REMOVED DURING REGULAR MOWING OPERATIONS, AND AS NEEDED.
- VISIBLE SIGNS OF EROSION IN THE POND AS WELL AS THE RIP-RAP OR GABION OUTLET AREA SHALL BE REPAIRED AS SOON AS IT IS NOTICED.

NON-ROUTINE MAINTENANCE TO BE PERFORMED BY HOWARD COUNTY:

- STRUCTURAL COMPONENTS OF THE POND SUCH AS THE DAM, THE RISER, AND THE PIPES SHALL BE REPAIRED UPON THE DETECTION OF ANY DAMAGE. THE COMPONENTS SHALL BE INSPECTED DURING ROUTINE MAINTENANCE OPERATIONS.
- SEDIMENTS SHALL BE REMOVED FROM THE POND, AND FOREBAY, NO LATER THAN WHEN THE CAPACITY OF THE POND, OR FOREBAY, IS HALF FULL OF SEDIMENT, OR, WHEN DEEMED NECESSARY FOR AESTHETIC REASONS, UPON APPROVAL FROM THE DEPARTMENT OF PUBLIC WORKS.



AS-BUILT CERTIFICATION	
I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE AS-BUILT PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.	
DEVELOPER	13304
DATE	8/28/03
<p>CERTIFY MEANS TO STATE OR DECLARE A PROFESSIONAL OPINION BASED UPON ON-SITE INSPECTIONS AND MATERIAL TESTS WHICH ARE CONDUCTED DURING CONSTRUCTION. THE ON-SITE INSPECTIONS AND MATERIAL TESTS ARE THOSE INSPECTIONS AND TESTS DEEMED SUFFICIENT AND APPROPRIATE BY COMMONLY ACCEPTED ENGINEERING STANDARDS. CERTIFY DOES NOT MEAN OR IMPLY A GUARANTEE BY THE ENGINEER NOR DOES AN ENGINEER'S CERTIFICATION RELIEVE ANY OTHER PARTY FROM MEETING REQUIREMENTS IMPOSED BY CONTRACT, EMPLOYMENT, OR OTHER MEANS, INCLUDING MEETING COMMONLY ACCEPTED INDUSTRY PRACTICES.</p>	
<p>BY THE DEVELOPER:</p> <p>DATE: 11/10/06</p>	
<p>BY THE ENGINEER:</p> <p>DATE: 10/23/05</p>	
<p>THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL.</p> <p>DATE: 1/10/06</p>	
<p>THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.</p> <p>DATE: 1/10/06</p>	
<p>APPROVED: DEPARTMENT OF PUBLIC WORKS</p> <p>DATE: 1-19-06</p>	
<p>APPROVED: DEPARTMENT OF PLANNING AND ZONING</p> <p>DATE: 1/10/06</p>	

BENCHMARK ENGINEERING, INC.
ENGINEERS • LAND SURVEYORS • PLANNERS

8480 BALTIMORE NATIONAL PIKE & SUITE 418
ELLCOTT CITY, MARYLAND 21043
PHONE: 410-465-6105 • FAX: 410-465-6644
WWW.BEI-CIVILENGINEERING.COM

OWNER/DEVELOPER: DORSEY MILL, LLC
C/O JAMES H. SELFRIDGE BUILDERS, INC.
14045 GARED DRIVE
GLENWOOD, MARYLAND 21738

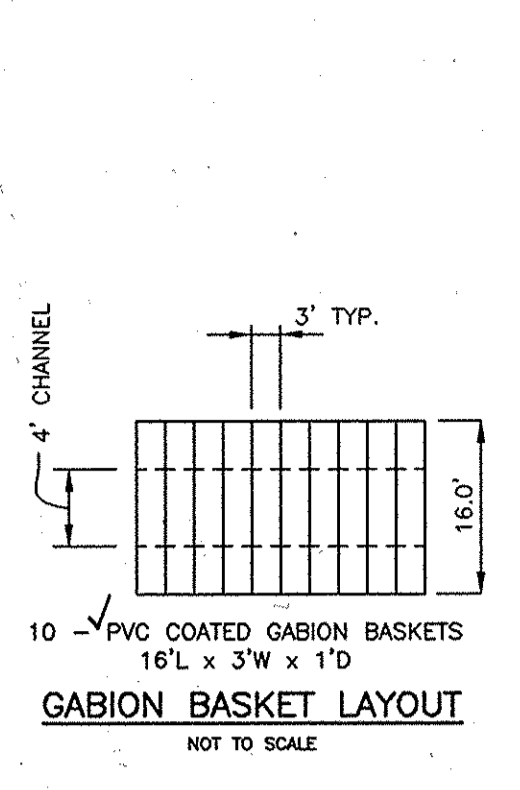
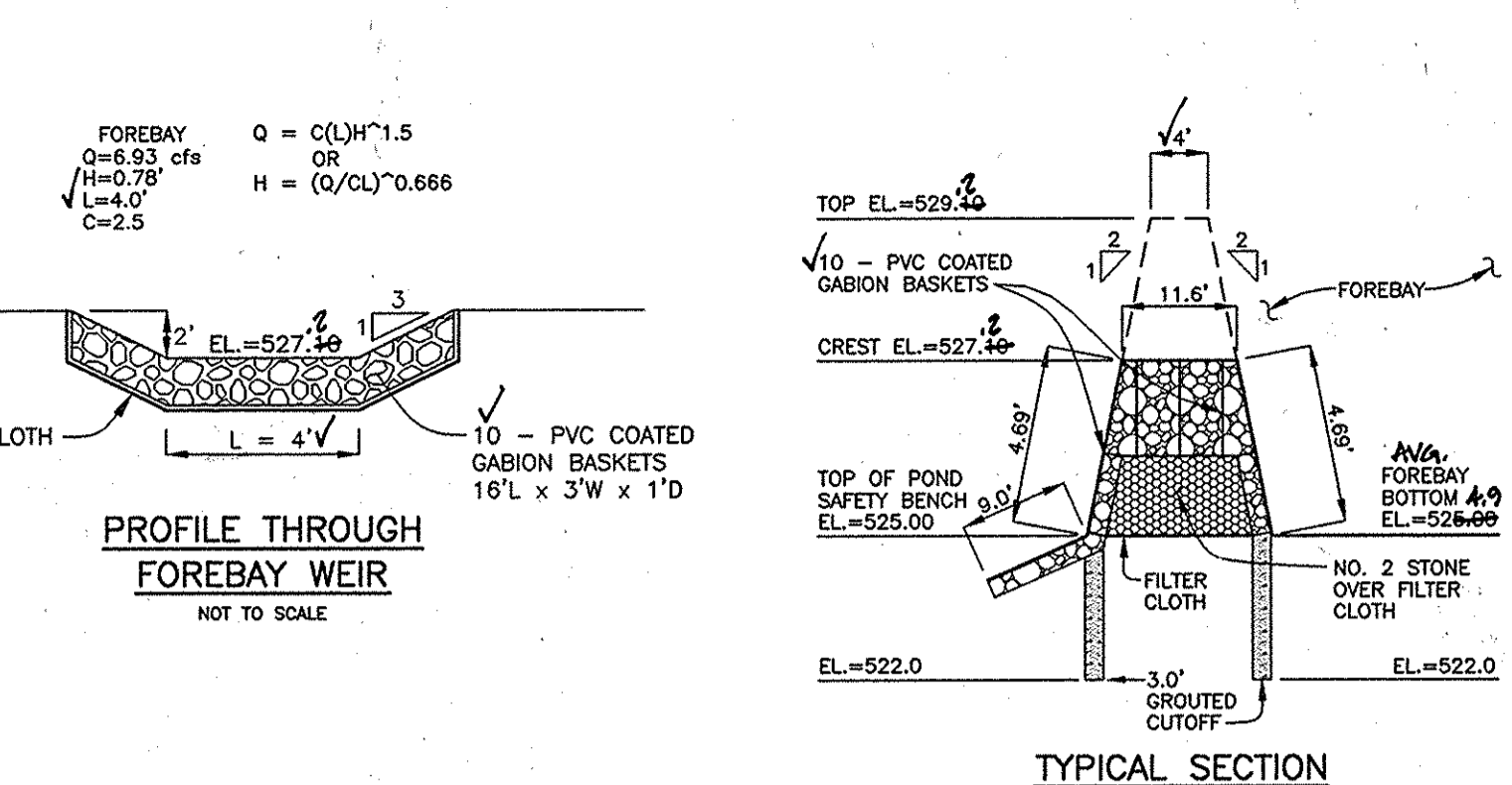
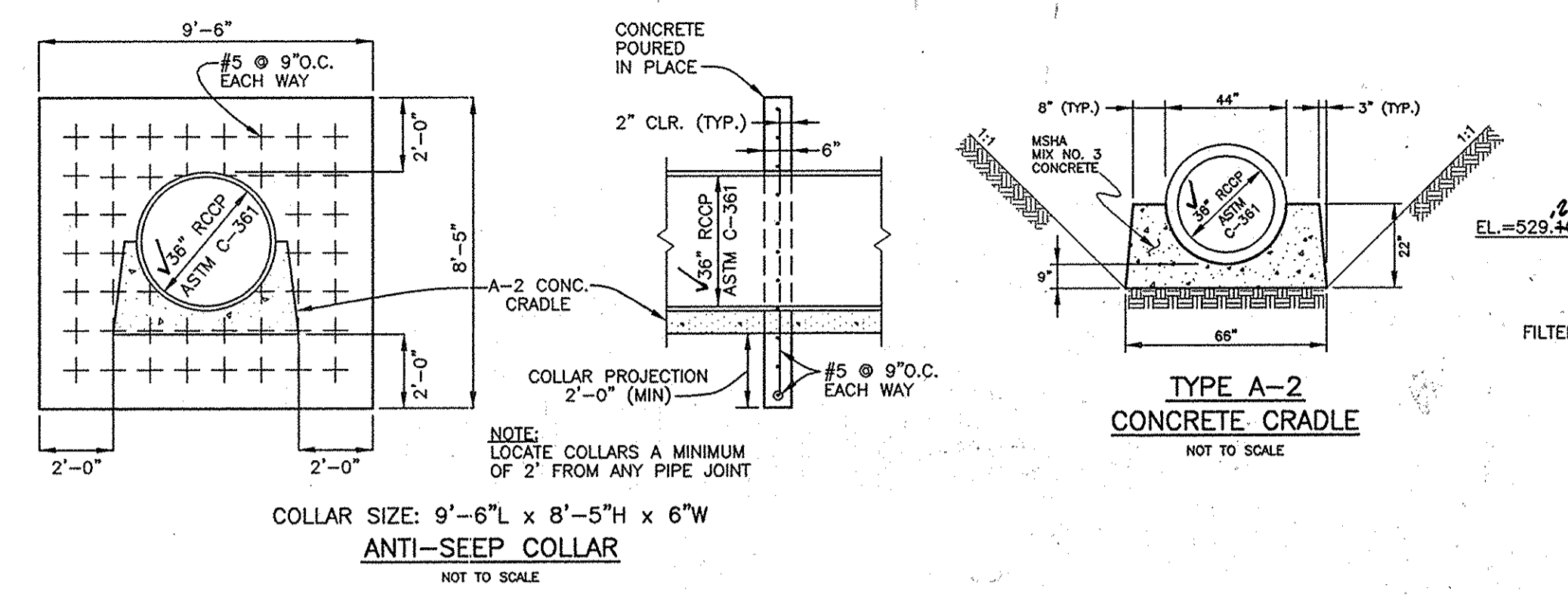
PROJECT: CLARKS MEADOW
LOTS 1-26
NON-BUILDABLE PRESERVATION PARCELS 'A' THRU 'G'
FOREST MITIGATION BANK
A RESUBDIVISION OF CLARKS WOODS I, LOT 4, PLAT NO. 14203

LOCATION: TAX MAP: 21 PARCEL: 227
GRID: 17 ZONED: RC-DEO
ELECTION DISTRICT NO. 4
HOWARD COUNTY, MARYLAND

TITLE: STORMWATER MANAGEMENT DETAILS
FACILITY #1

DATE: JANUARY, 2006 **PROJECT NO.:** 1736

DESIGN: DBT **DRAFT:** DBT **CHECK:** CAM **SCALE:** 1" = 50' **SHEET:** 16 **OF:** 19



OPERATION AND MAINTENANCE SCHEDULE FOR JOINTLY MAINTAINED EXTENDED DETENTION POND

ROUTINE MAINTENANCE TO BE PERFORMED BY H.O.A.:

- FACILITY SHALL BE INSPECTED ANNUALLY AND AFTER MAJOR STORMS. INSPECTIONS SHALL BE PERFORMED DURING WET WEATHER TO DETERMINE IF THE POND IS FUNCTIONING PROPERLY.
- TOP AND SIDE SLOPES OF THE EMBANKMENT SHALL BE MOWED A MINIMUM OF TWO (2) TIMES PER YEAR, ONCE IN JUNE AND ONCE IN SEPTEMBER. OTHER SIDE SLOPES AND MAINTENANCE ACCESS SHALL BE MOWED AS NEEDED.
- DEBRIS AND LITTER SHALL BE REMOVED DURING REGULAR MOWING OPERATIONS AND AS NEEDED.
- VISIBLE SIGNS OF EROSION IN THE POND AS WELL AS THE RIP-RAP OR GABION OUTLET AREA SHALL BE REPAIRED AS SOON AS IT IS NOTICED.

NON-ROUTINE MAINTENANCE TO BE PERFORMED BY HOWARD COUNTY:

- STRUCTURAL COMPONENTS OF THE POND SUCH AS THE DAM, THE RISER, AND THE PIPES SHALL BE REPAIRED UPON THE DETECTION OF ANY DAMAGE. THE COMPONENTS SHALL BE INSPECTED DURING ROUTINE MAINTENANCE OPERATIONS.
- SEDIMENTS SHALL BE REMOVED FROM THE POND, AND FOREBAY, NO LATER THAN WHEN THE CAPACITY OF THE POND, OR FOREBAY, IS HALF FULL OF SEDIMENT, OR, WHEN DEEMED NECESSARY FOR AESTHETIC REASONS, UPON APPROVAL FROM THE DEPARTMENT OF PUBLIC WORKS.

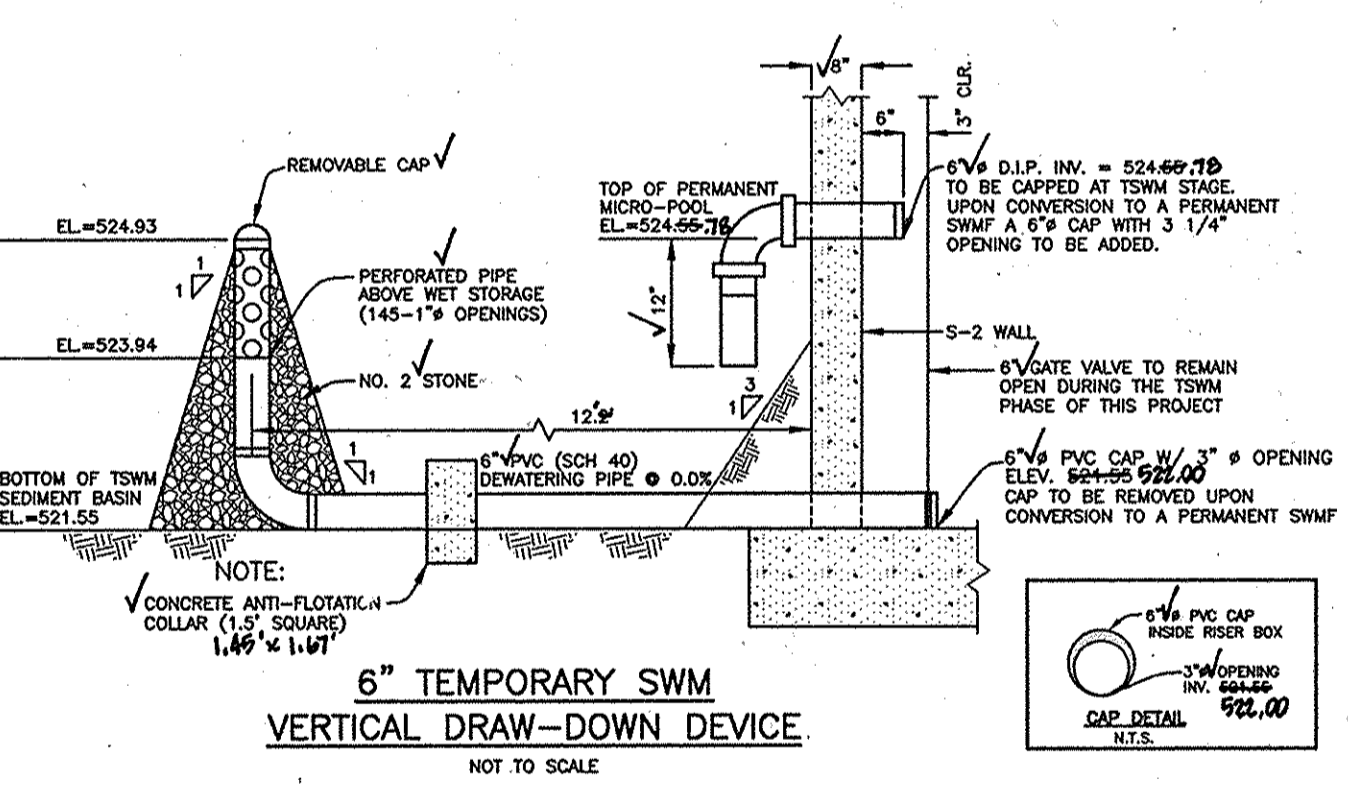
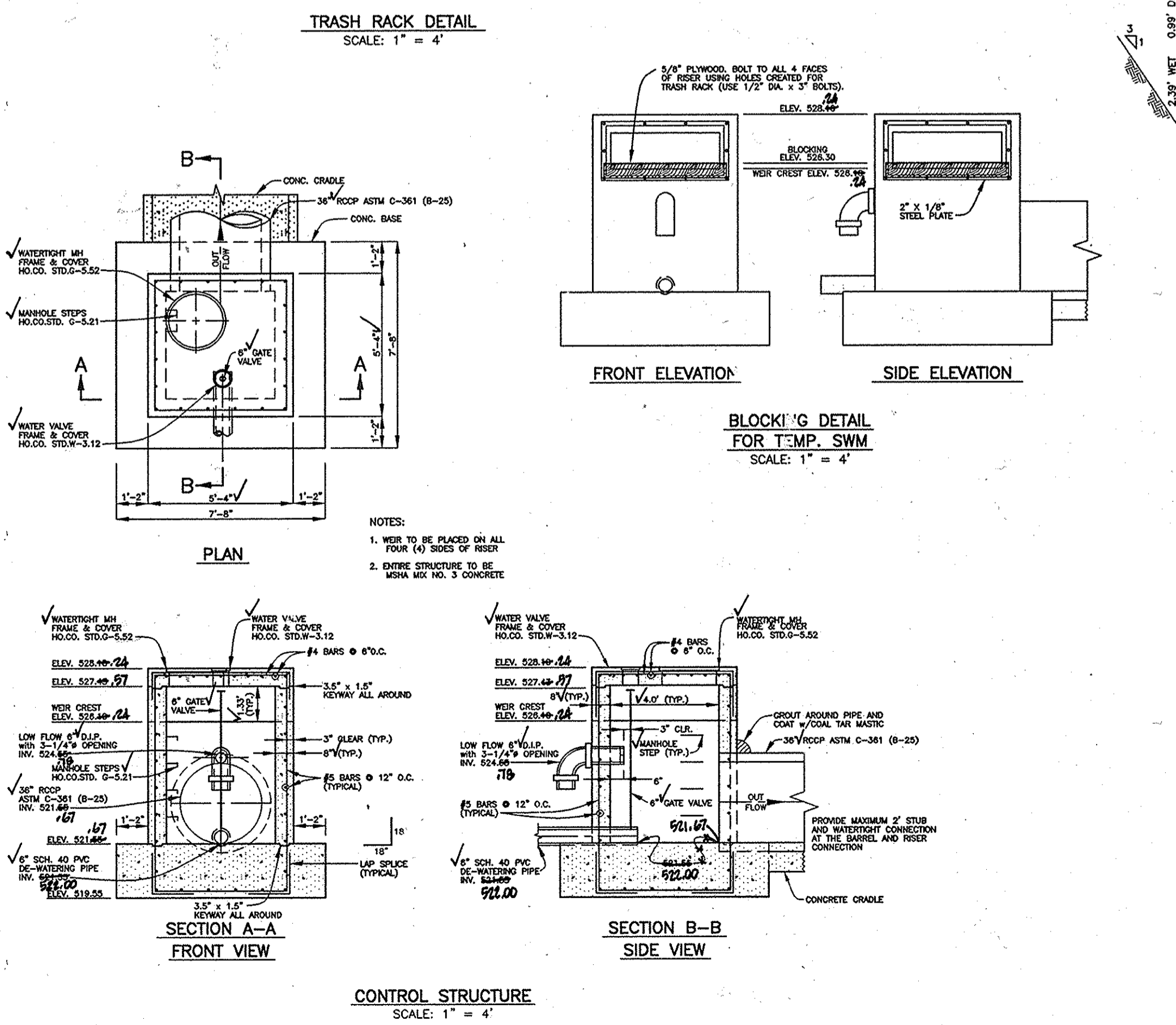
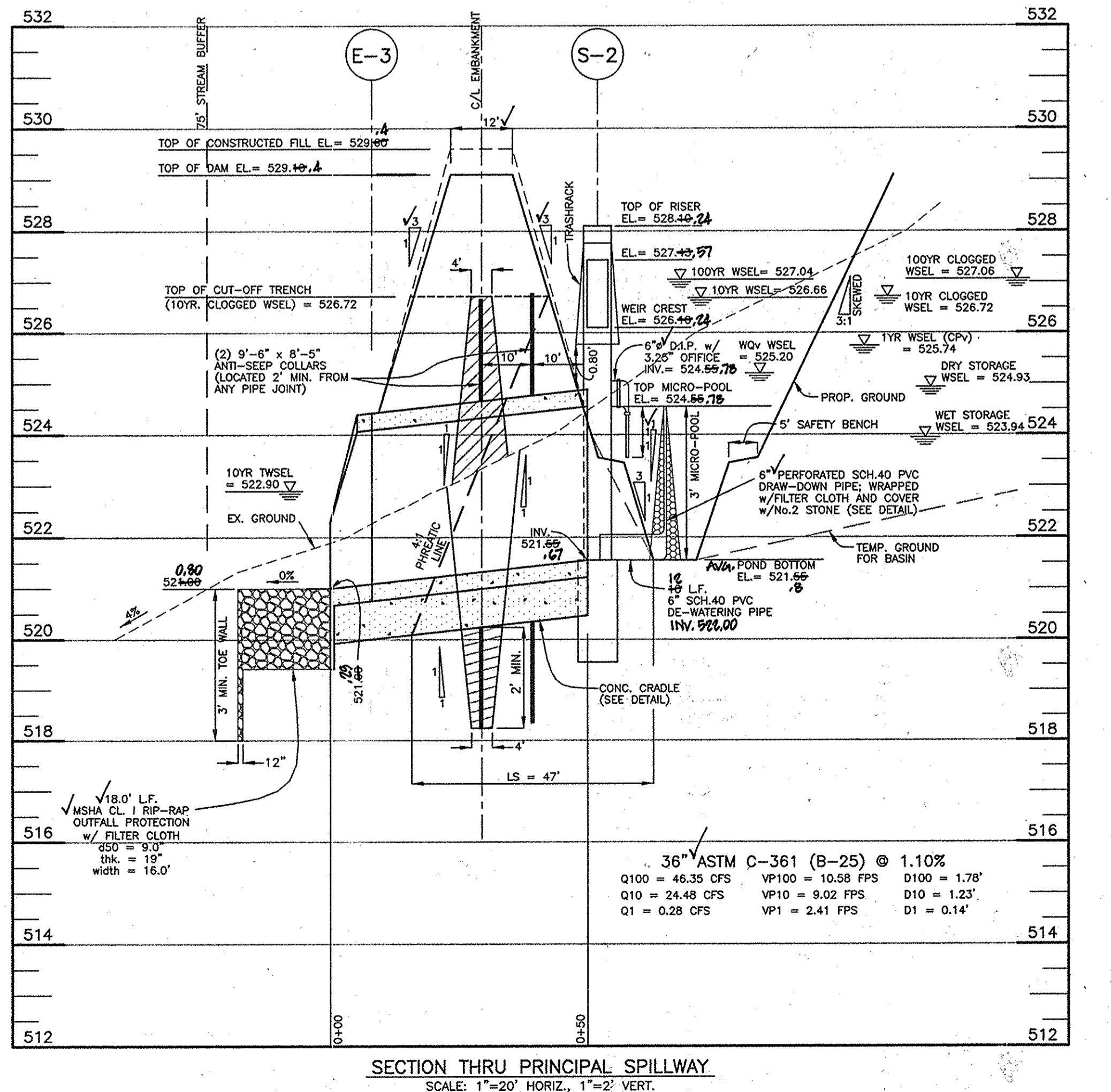
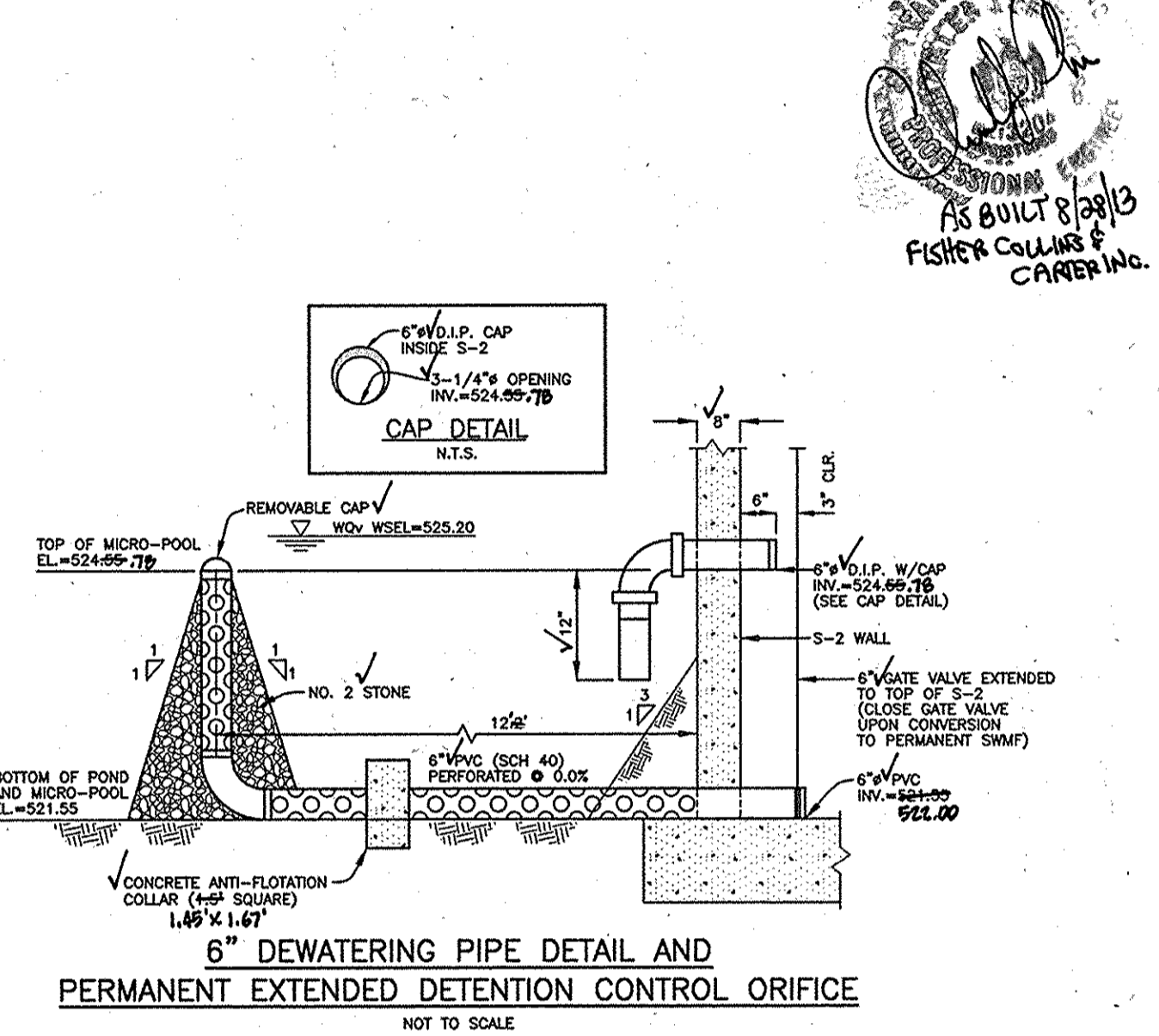
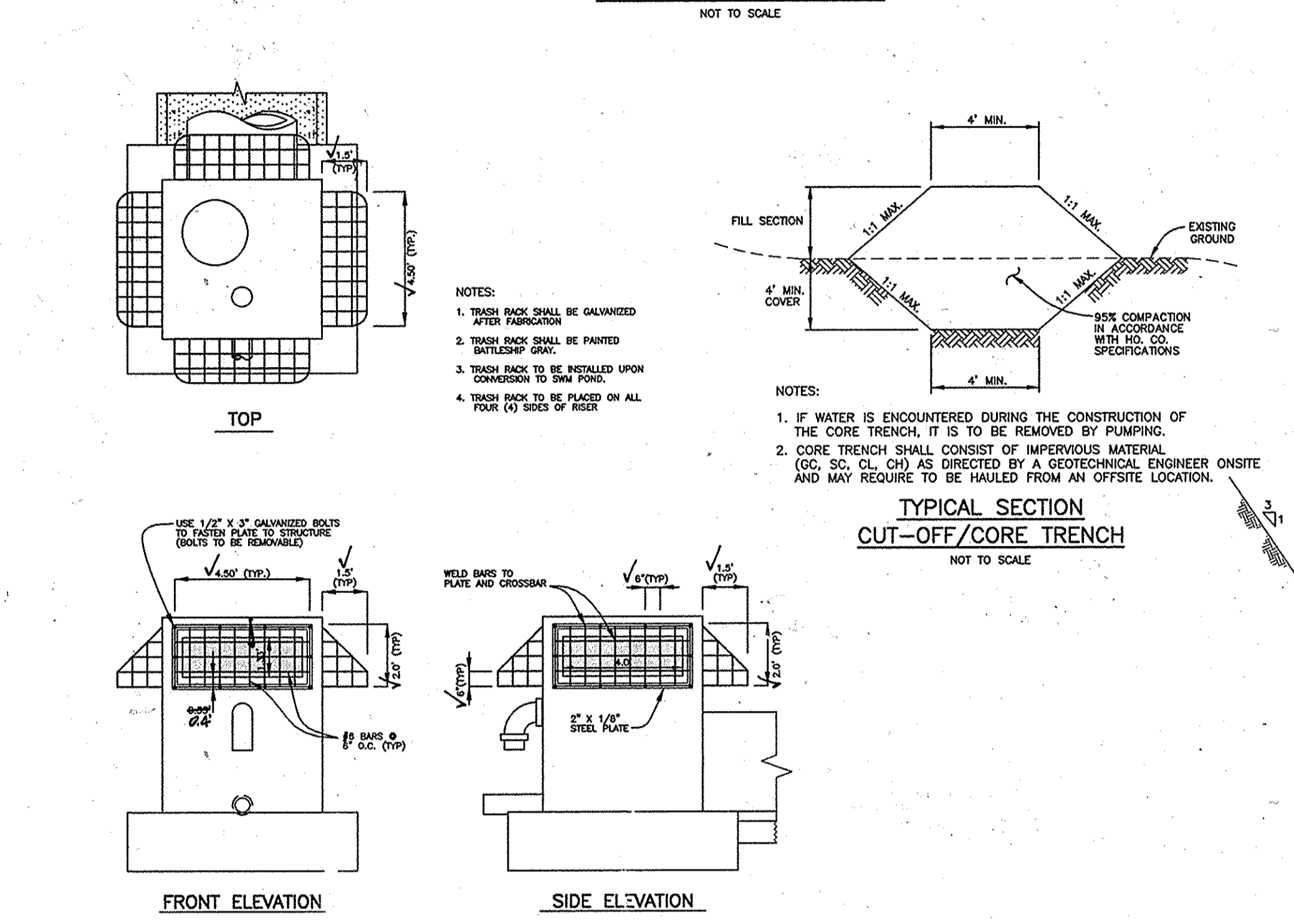
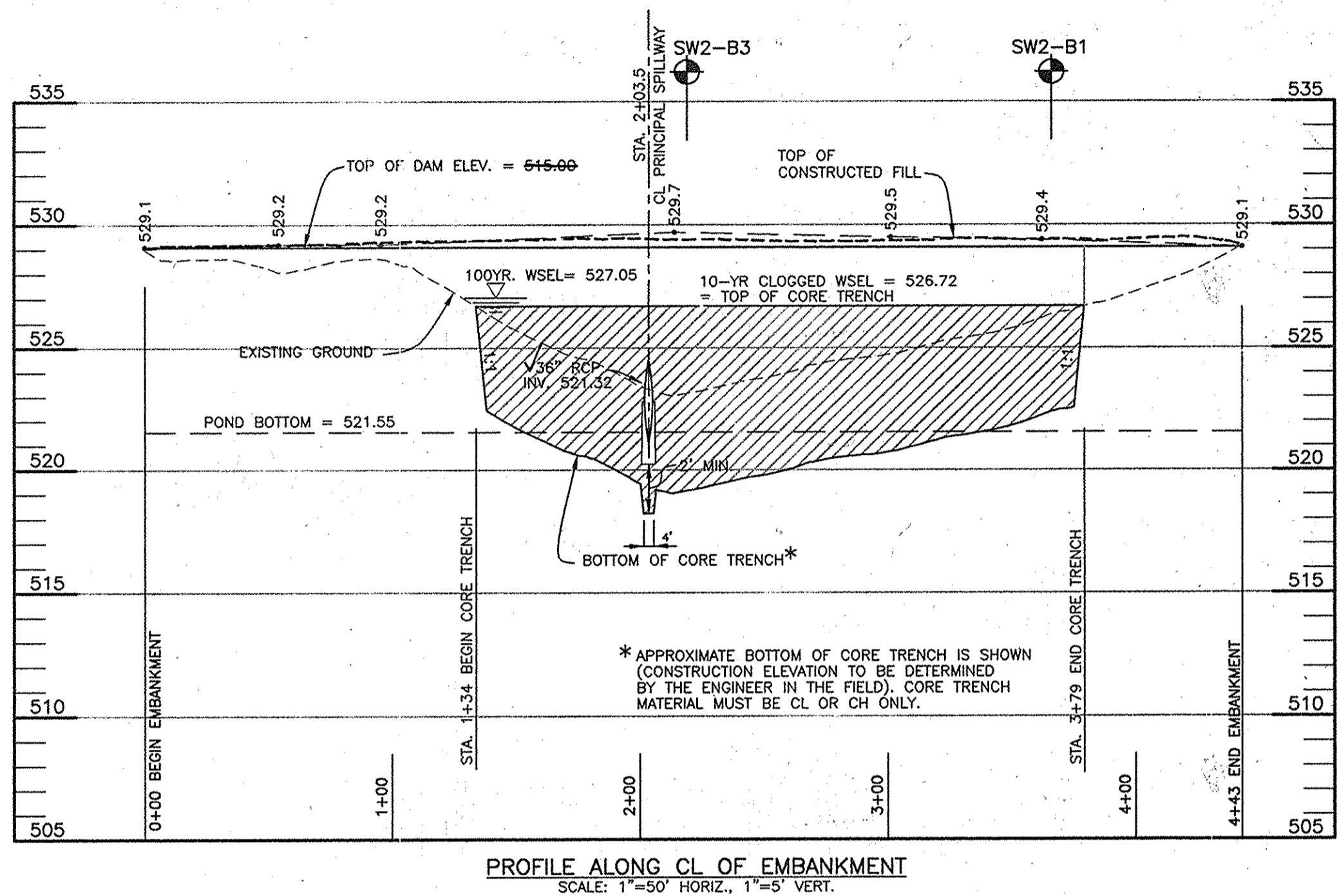
GEOTECHNICAL ENGINEER RECOMMENDATIONS:

EMBANKMENT AND CUT-OFF TRENCH CONSTRUCTION

THE AREAS OF THE PROPOSED SWM FACILITIES SHOULD BE STRIPPED OF TOPSOIL AND ANY OTHER UNSUITABLE MATERIALS FROM THE EMBANKMENT OR STRUCTURE AREAS IN ACCORDANCE WITH SOIL CONSERVATION GUIDELINES. AFTER STRIPPING OPERATIONS HAVE BEEN COMPLETED, THE EXPOSED SUBGRADE MATERIALS SHOULD BE PROTECTED WITH A LOADED DUMP TRUCK OR SIMILAR EQUIPMENT IN THE PRESENCE OF A GEOTECHNICAL ENGINEER OR HIS REPRESENTATIVE. FOR AREAS THAT ARE NOT ACCESSIBLE TO A DUMP TRUCK, THE EXPOSED MATERIALS SHOULD BE OBSERVED AND TESTED BY A GEOTECHNICAL ENGINEER OR HIS REPRESENTATIVE UTILIZING A DYNAMIC CONE PENETROMETER. ANY EXCESSIVELY SOFT OR LOOSE MATERIALS IDENTIFIED BY PROFFERLOOM OR PENETROMETER TESTING SHOULD BE EXCAVATED TO SUITABLE FIRM SOIL, AND THEN GRADES RE-ESTABLISHED BY BACKFILLING WITH SUITABLE SOIL.

A REPRESENTATIVE OF THE GEOTECHNICAL ENGINEER SHOULD BE PRESENT TO MONITOR PLACEMENT AND COMPACTION OF FILL FOR THE EMBANKMENT AND CUT-OFF TRENCH. IN ACCORDANCE WITH NRCS-MD CODE NO. 378 POND STANDARDS/SPECIFICATIONS, SOILS CONSIDERED SUITABLE FOR THE CENTER OF EMBANKMENT AND CUT-OFF TRENCH SHALL CONFORM TO UNIFIED SOIL CLASSIFICATION GC, SC, CH, OR CL AND MUST HAVE AT LEAST 30% PASSING THE #200 SIEVE.

IT IS OUR PROFESSIONAL OPINION THAT IN ADDITION TO THE SOIL MATERIALS DESCRIBED ABOVE, A FINE-GRAINED SOIL, INCLUDING SILT(SL), WITH A PLASTICITY INDEX OF 10 OR MORE CAN BE UTILIZED FOR THE CENTER OF THE EMBANKMENT AND CORE TRENCH. ALL FILL MATERIALS MUST BE PLACED AND COMPACTED IN ACCORDANCE WITH NRCS-MD CODE NO. 378 SPECIFICATIONS.



AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

DATE: 8/29/13

BY THE DEVELOPER: *Donald A. Mason* 11/10/06

BY THE ENGINEER: *Donald A. Mason* 12/23/06

USDA - NATURAL RESOURCES CONSERVATION SERVICE: *Jim Meyer* 1/11/06

HOWARD SOIL CONSERVATION DISTRICT: *Chadley* 1/14/06

APPROVED: DEPARTMENT OF PUBLIC WORKS

APPROVED: DEPARTMENT OF PLANNING AND ZONING: *Candy Hamant* 1/30/06

NO.	DATE	REVISION

BENCHMARK ENGINEERING, INC.
8480 BALTIMORE NATIONAL PIKE & SUITE 418
ELLICOTT CITY, MARYLAND 21043
PHONE: 410-465-6105 • FAX: 410-465-6644
WWW.BEI-CIVILENGINEERING.COM

OWNER/DEVELOPER: DORSEY MILL, LLC
C/O JAMES H. SELFRIDGE BUILDERS, INC.
14045 GARED DRIVE
GLENWOOD, MARYLAND 21738

PROJECT: CLARKS MEADOW
LOTS 1-26
NON-BUILDABLE PRESERVATION PARCELS 'A' THRU 'G'
FOREST MITIGATION BANK
A RESUBDIVISION OF CLARKS WOODS I, LOT 4, PLAT NO. 14203

LOCATION: TAX MAP: 21 PARCEL: 227
GRID: 17 ZONED: RC-DEO
ELECTION DISTRICT NO. 4
HOWARD COUNTY, MARYLAND

TITLE: STORMWATER MANAGEMENT DETAILS
FACILITY #2

DATE: JANUARY, 2006 **PROJECT NO.:** 1736

DESIGN: DBT **DRAFT:** DBT **CHECK:** CAM **SCALE:** 1" = 50' **SHEET:** 17 **OF:** 19

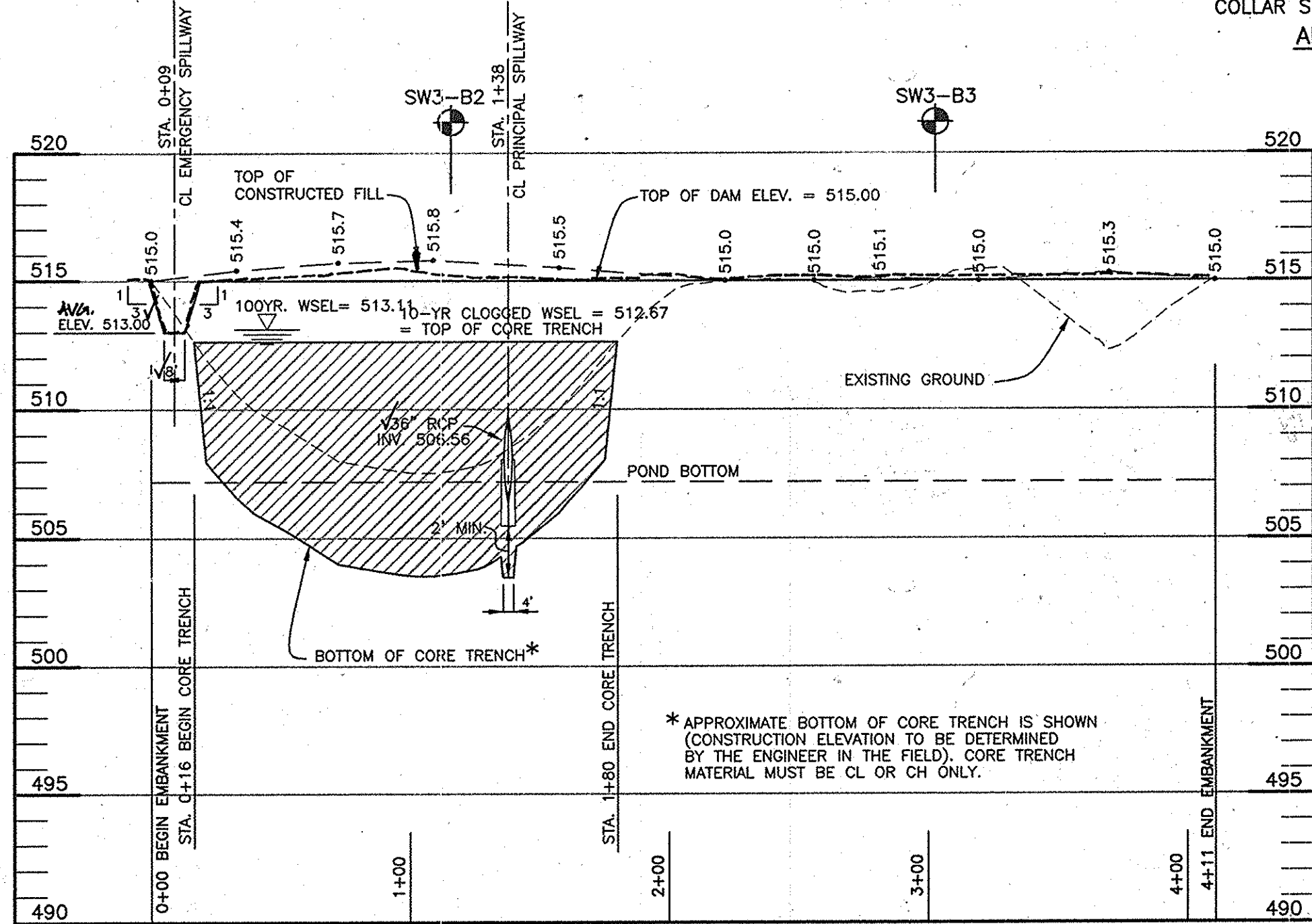
OPERATION AND MAINTENANCE SCHEDULE FOR JOINTLY MAINTAINED EXTENDED DETENTION POND

ROUTINE MAINTENANCE TO BE PERFORMED BY H.O.A.:

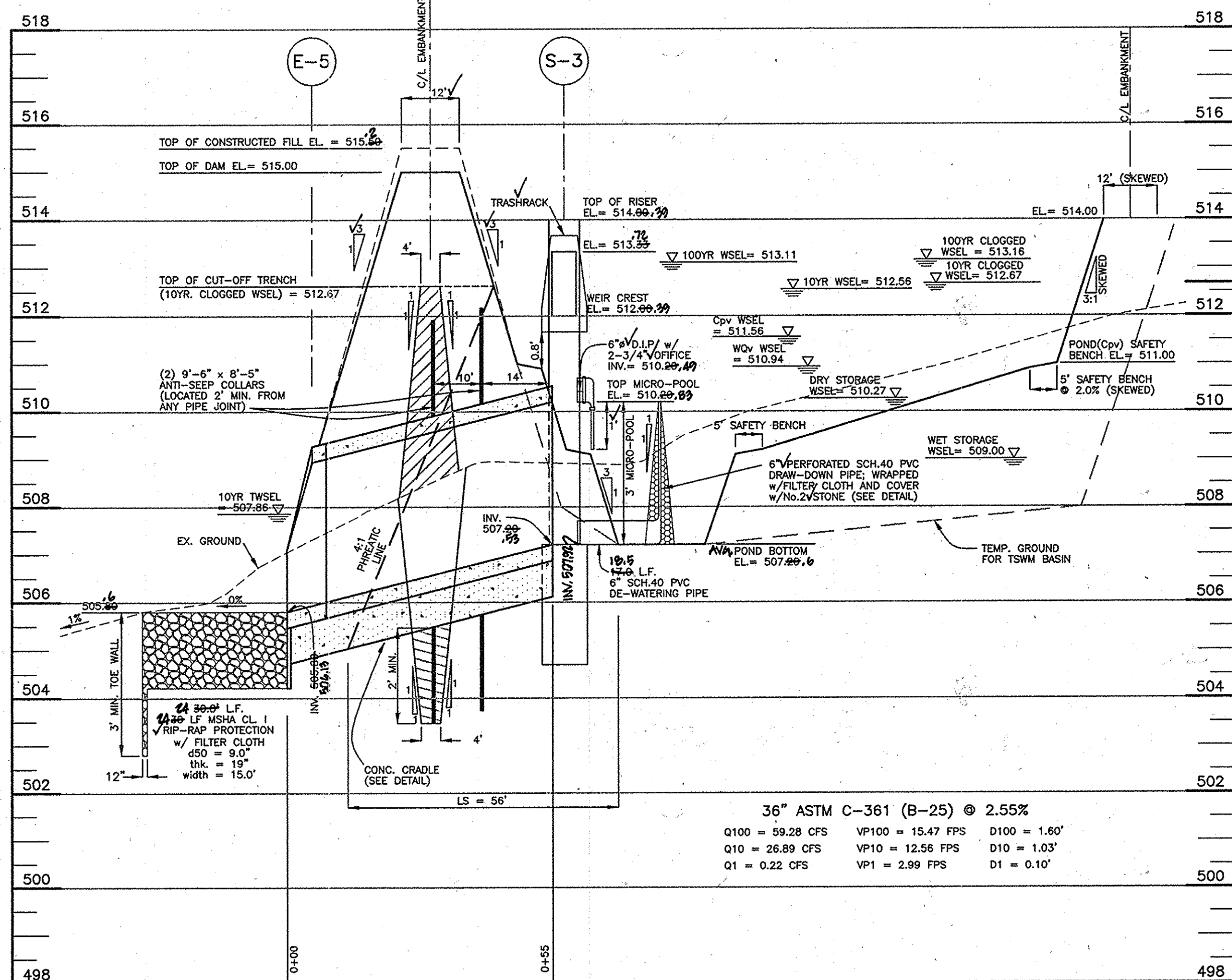
- FACILITY SHALL BE INSPECTED ANNUALLY AND AFTER MAJOR STORMS. INSPECTIONS SHALL BE PERFORMED DURING WET WEATHER TO DETERMINE IF THE POND IS FUNCTIONING PROPERLY.
- TOP AND SIDE SLOPES OF THE EMBANKMENT SHALL BE MOWED A MINIMUM OF TWO (2) TIMES PER YEAR, ONCE IN JUNE AND ONCE IN SEPTEMBER. OTHER SIDE SLOPE AND MAINTENANCE ACCESS SHALL BE MOWED AS NEEDED.
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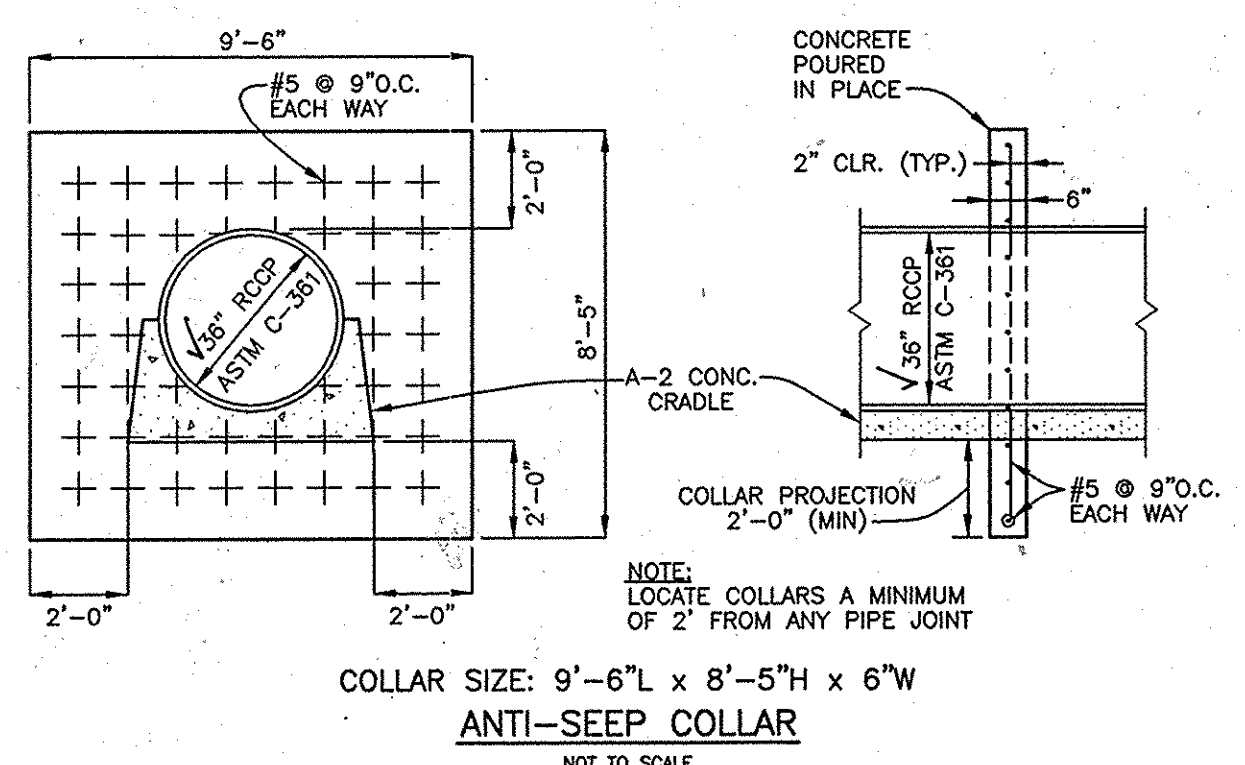
PROFILE ALONG CL OF EMBANKMENT
SCALE: 1"=50' HORIZ., 1"=5' VERT.



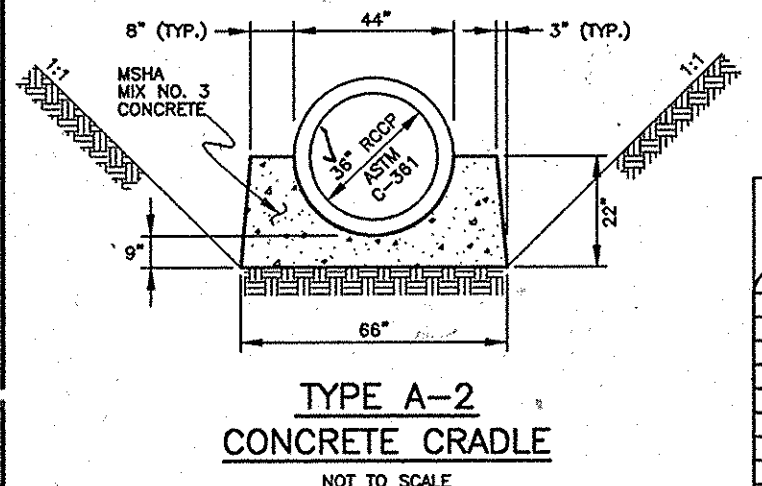
SECTION THRU PRINCIPAL SPILLWAY
SCALE: 1"=20' HORIZ., 1"=2' VERT.

36" ASTM C-361 (B-25) @ 2.55%

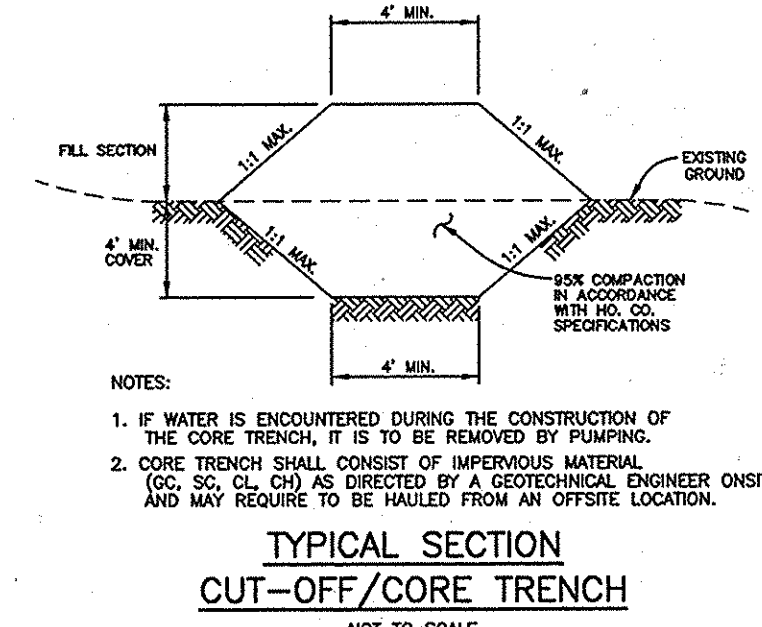
Q100 = 59.28 CFS	VP100 = 15.47 FPS	D100 = 1.60'
Q10 = 26.89 CFS	VP10 = 12.56 FPS	D10 = 1.03'
Q1 = 0.22 CFS	VP1 = 2.99 FPS	D1 = 0.10'



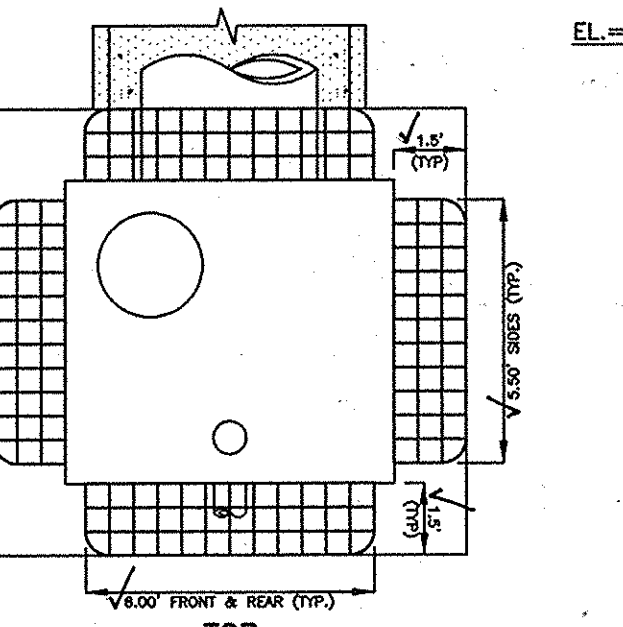
COLLAR SIZE: 9'-6" L x 8'-5" H x 6" W
ANTI-SEEP COLLAR
NOT TO SCALE



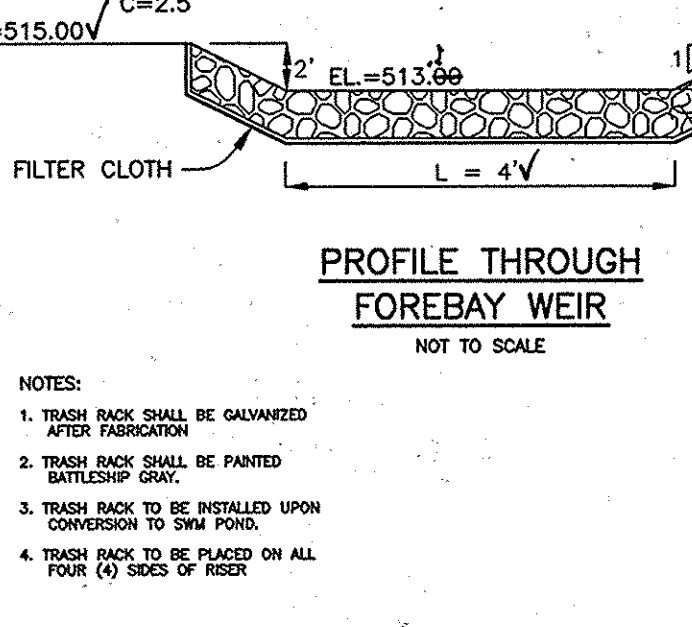
TYPE A-2
CONCRETE CRADLE
NOT TO SCALE



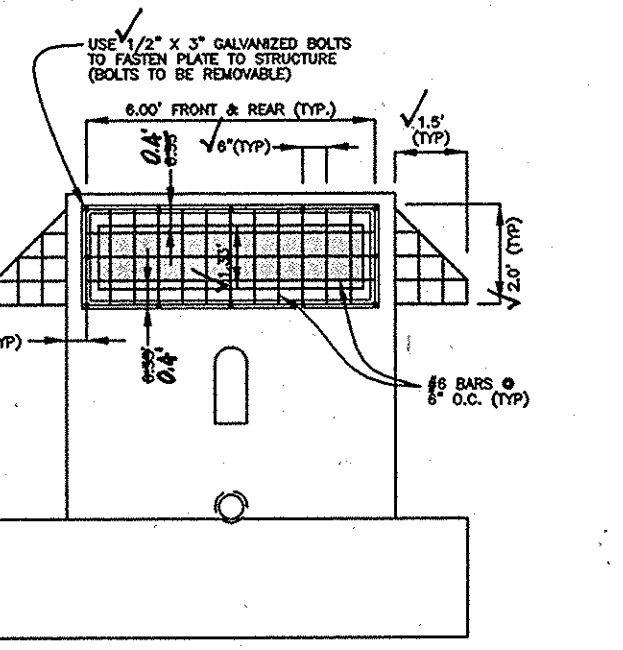
TYPICAL SECTION
CUT-OFF/CORE TRENCH
NOT TO SCALE



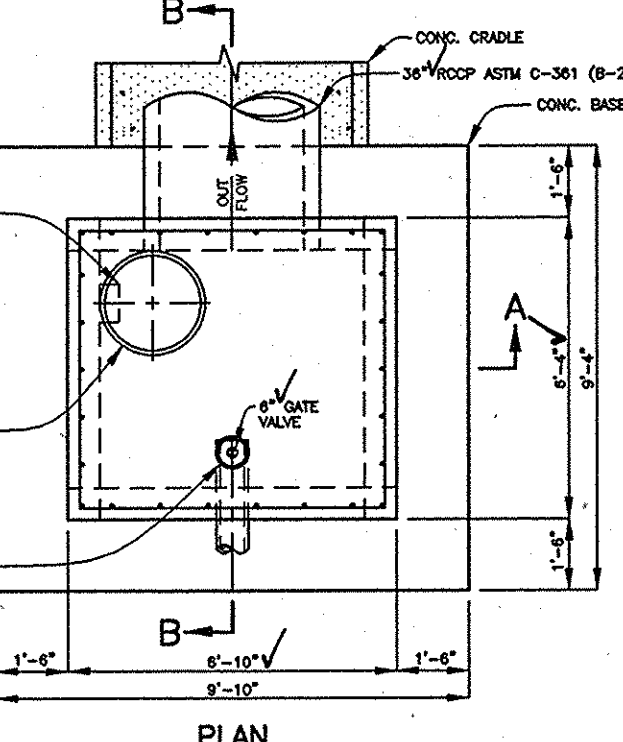
FRONT ELEVATION



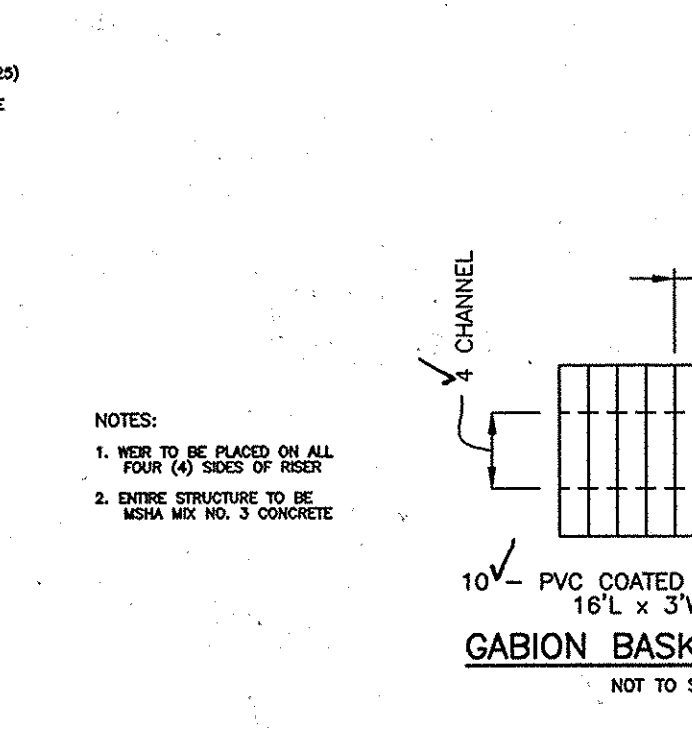
SIDE ELEVATION



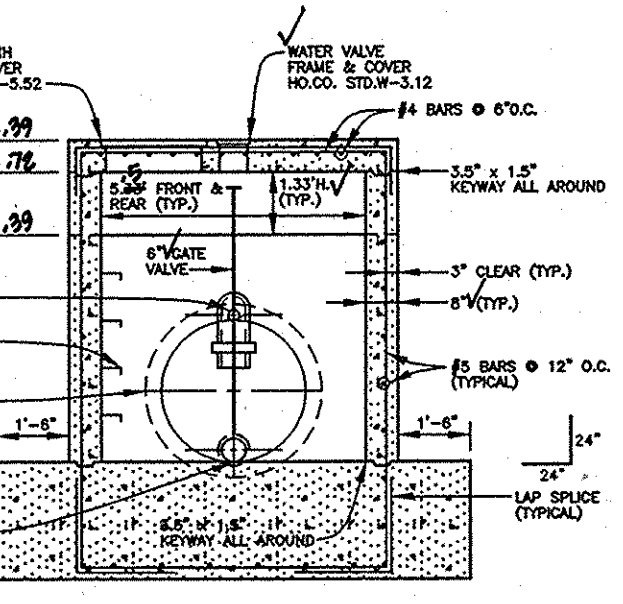
TRASH RACK DETAIL
SCALE: 1" = 4"



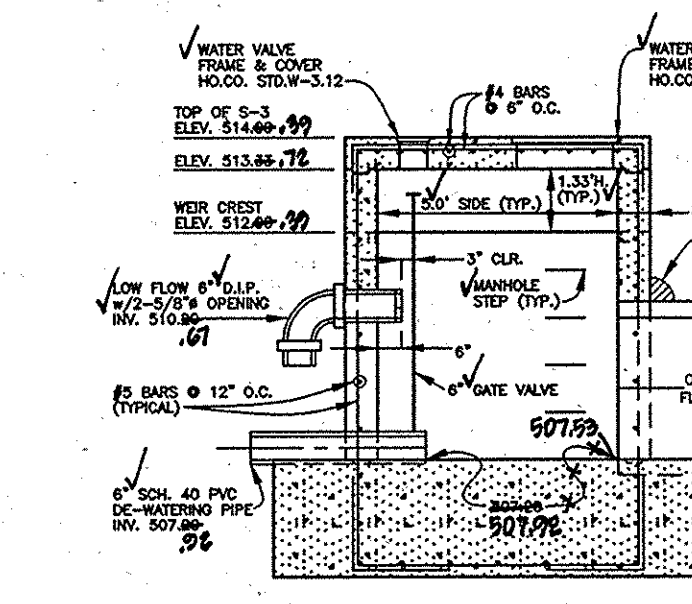
PLAN



GABION BASKET LAYOUT
NOT TO SCALE

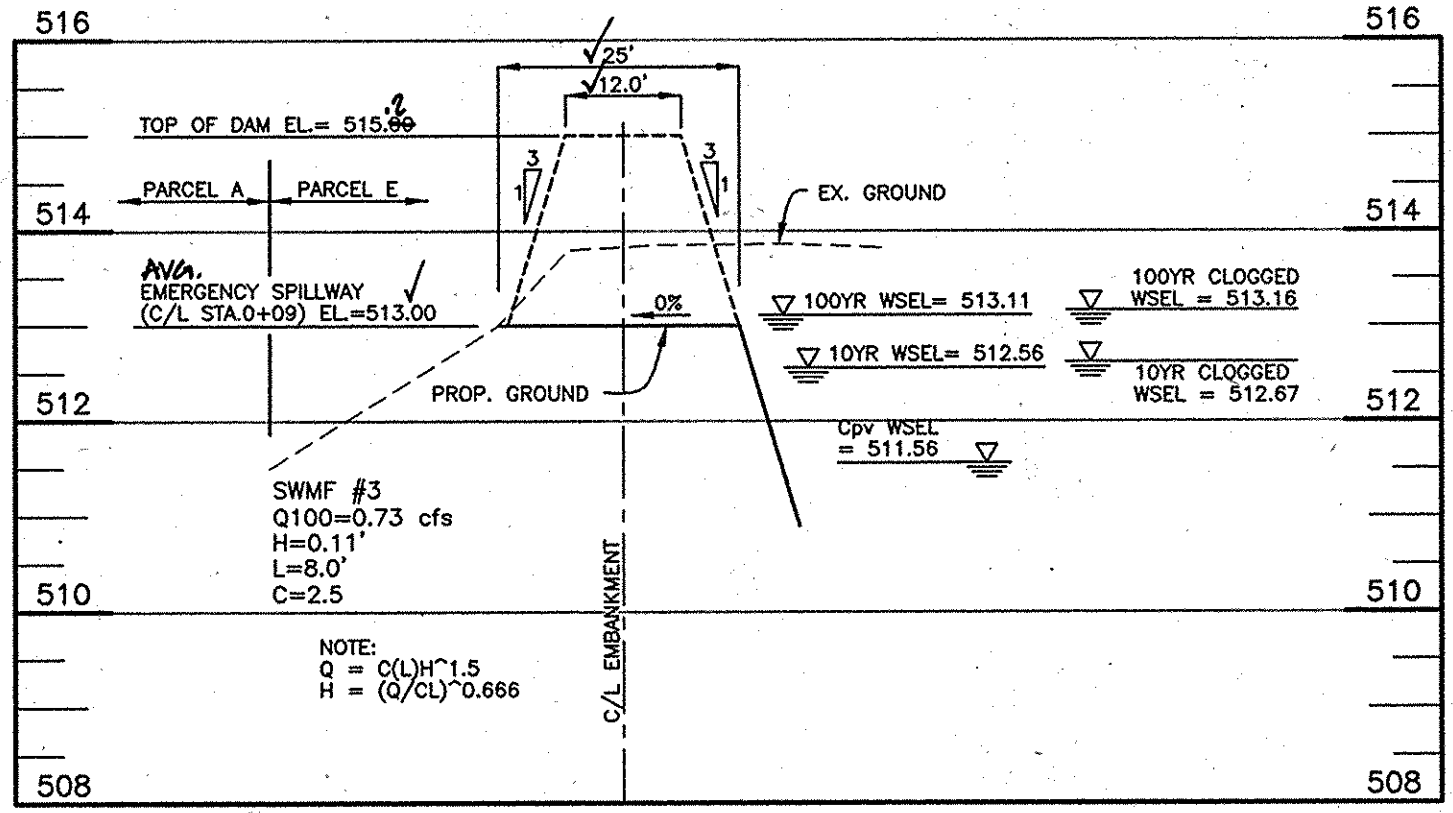


SECTION A-A
FRONT VIEW

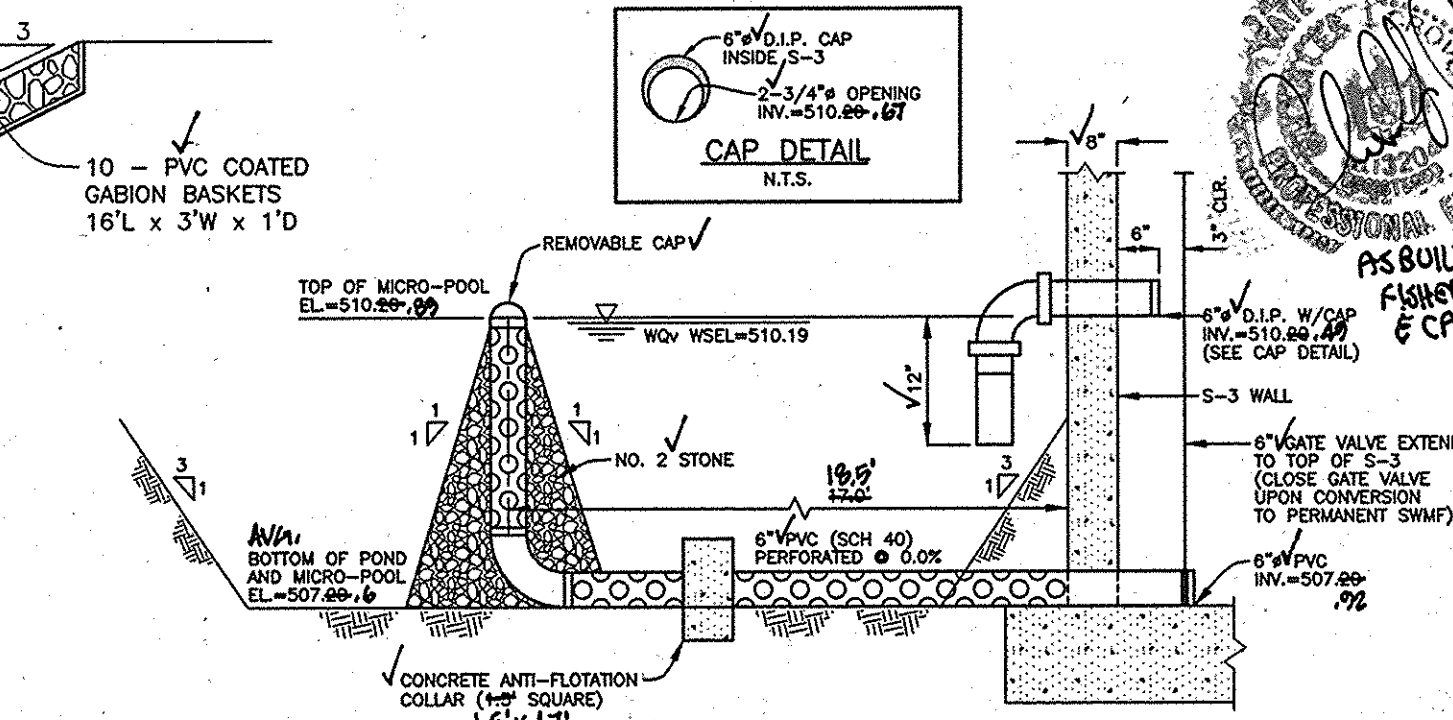


SECTION B-B
SIDE VIEW

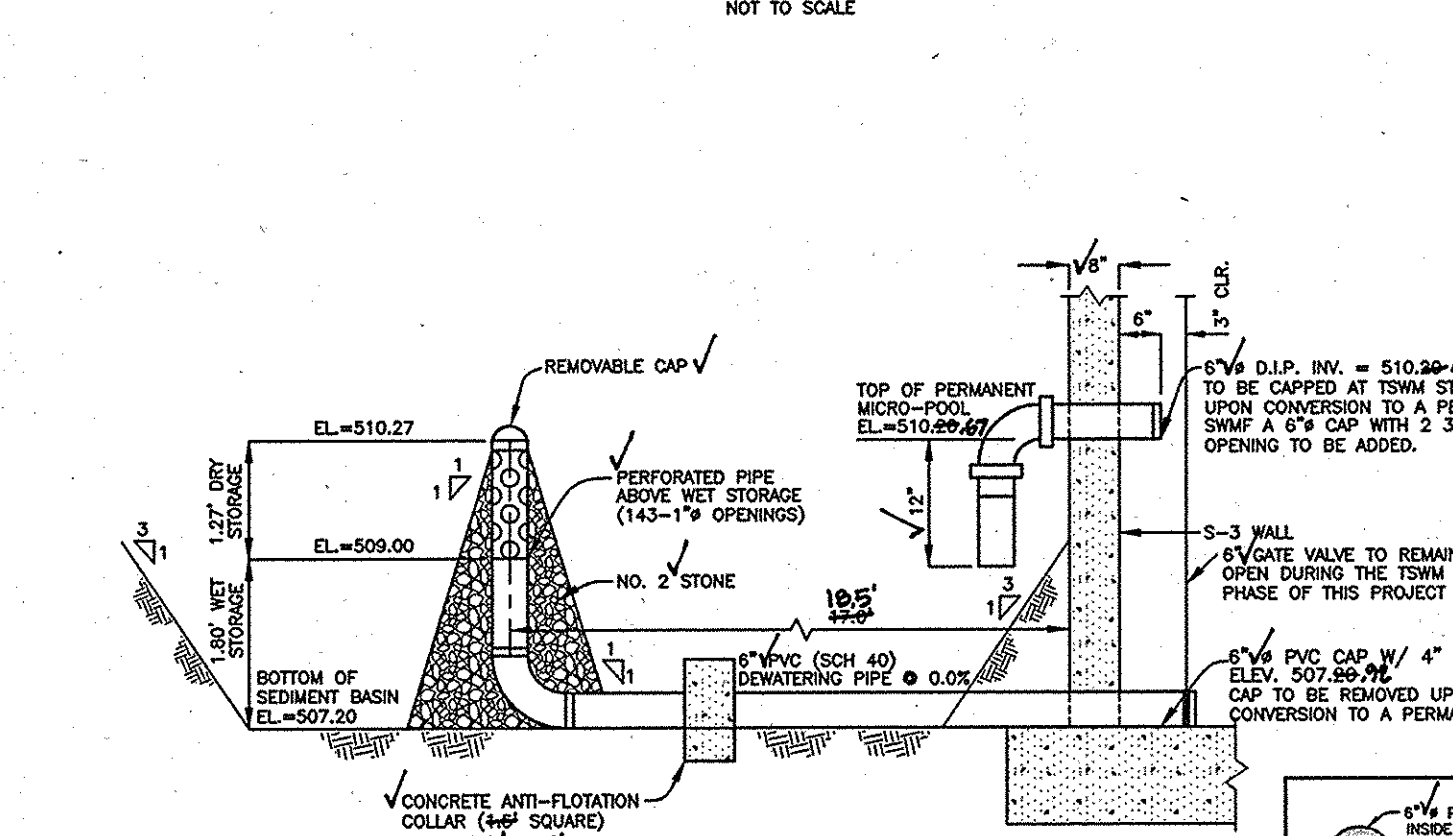
CONTROL STRUCTURE
SCALE: 1" = 4"



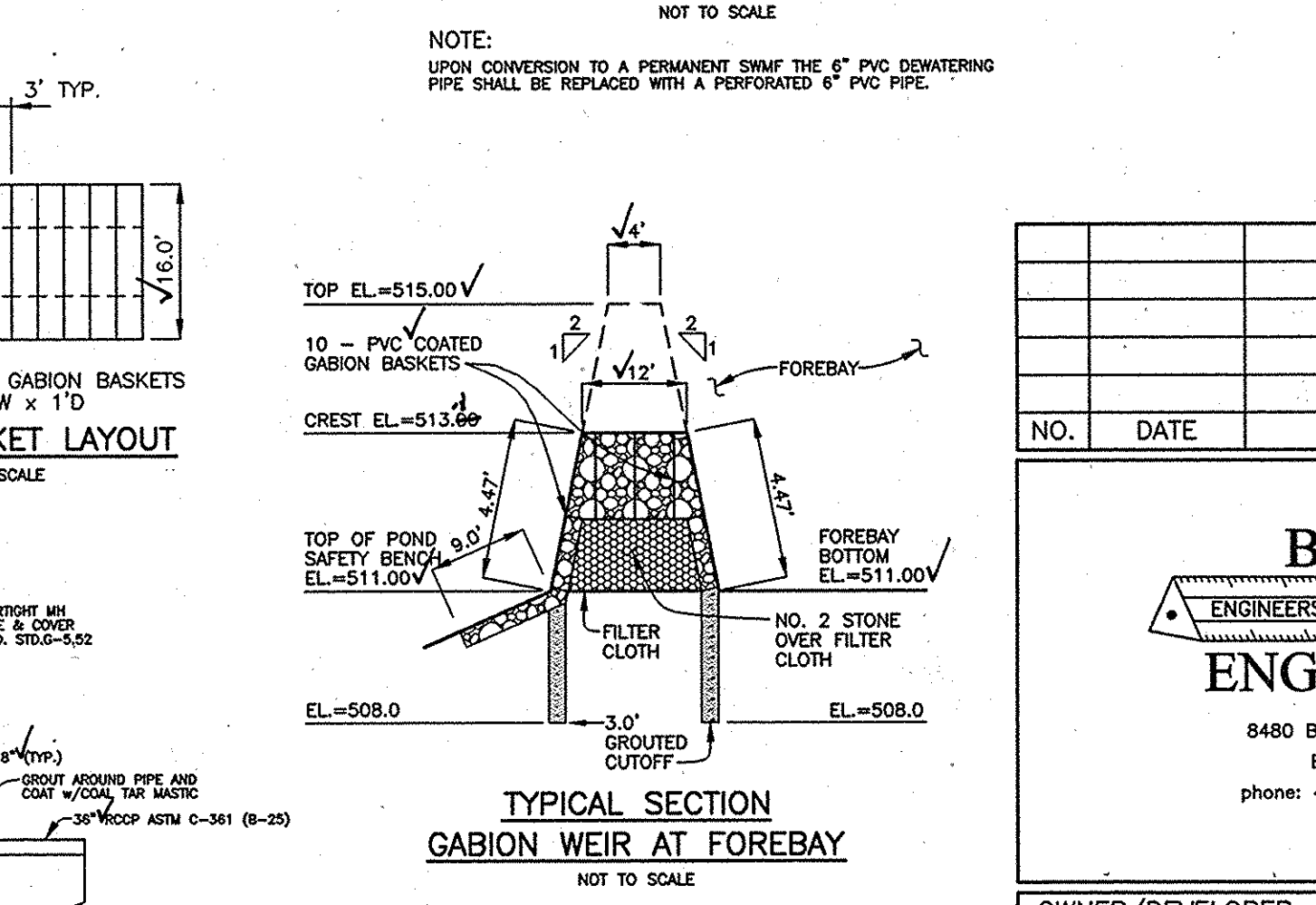
SECTION THRU EMERGENCY SPILLWAY
SCALE: 1"=20' HORIZ., 1"=2' VERT.



6" DEWATERING PIPE DETAIL AND
PERMANENT EXTENDED DETENTION CONTROL ORIFICE
NOT TO SCALE



6" TEMPORARY SWM
VERTICAL DRAW-DOWN DEVICE
NOT TO SCALE



TYPICAL SECTION
GABION WEIR AT FOREBAY
NOT TO SCALE

GEOTECHNICAL ENGINEER RECOMMENDATIONS:

EMBANKMENT AND CUT-OFF TRENCH CONSTRUCTION

THE AREAS OF THE PROPOSED SWM FACILITIES SHOULD BE STRIPPED OF TOPSOIL AND ANY OTHER UNSUITABLE MATERIALS FROM THE EMBANKMENT OR STRUCTURE AREAS IN ACCORDANCE WITH SOIL CONSERVATION GUIDELINES. AFTER STRIPPING OPERATIONS HAVE BEEN COMPLETED, THE EXPOSED SUBGRADE MATERIALS SHOULD BE PROFFERED WITH A LOADED DUMP TRUCK OR SIMILAR EQUIPMENT IN THE PRESENCE OF A GEOTECHNICAL ENGINEER OR HIS REPRESENTATIVE. FOR AREAS THAT ARE NOT ACCESSIBLE TO A DUMP TRUCK, THE EXPOSED MATERIALS SHOULD BE OBSERVED AND TESTED BY A GEOTECHNICAL ENGINEER OR HIS REPRESENTATIVE UTILIZING A DYNAMIC CONE PENETROMETER. ANY EXCESSIVELY SOFT OR LOOSE MATERIALS IDENTIFIED BY PROFFERROLLING OR PENETROMETER TESTING SHOULD BE EXCAVATED TO SUITABLE FIRM SOIL, AND THEN GRADES RE-ESTABLISHED BY BACKFILLING WITH SUITABLE SOIL.

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IT IS OUR PROFESSIONAL OPINION THAT IN ADDITION TO THE SOIL MATERIALS DESCRIBED ABOVE, A FINE-GRAINED SOIL, INCLUDING SILTY (L) WITH A PLASTICITY INDEX OF 10 OR MORE CAN BE UTILIZED FOR THE CENTER OF THE EMBANKMENT AND CORE TRENCH. ALL FILL MATERIALS MUST BE PLACED AND COMPACTED IN ACCORDANCE WITH NRCS-MD CODE NO. 378 SPECIFICATIONS.

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

PE NO. 13204
DATE 8/28/12

CERTIFY MEANS TO STATE OR DECLARE A PROFESSIONAL OPINION BASED UPON ON-SITE INSPECTIONS AND MATERIAL TESTS WHICH ARE CONSIDERED DURING CONSTRUCTION. THE ON-SITE INSPECTIONS AND MATERIAL TESTS ARE THOSE INSPECTIONS AND TESTS DEEMED SUFFICIENT AND APPROPRIATE BY COMMONLY ACCEPTED ENGINEERING STANDARDS. CERTIFY DOES NOT MEAN OR IMPLY A GUARANTEE BY THE ENGINEER NOR DOES AN ENGINEER'S CERTIFICATION RELIEVE ANY OTHER PARTY FROM MEETING REQUIREMENTS IMPOSED BY CONTRACT, EMPLOYMENT, OR OTHER MEANS, INCLUDING MEETING COMMONLY ACCEPTED INDUSTRY PRACTICES.

BY THE DEVELOPER:

I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL EMPLOY A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

DEVELOPER: *James H. Selfridge* 11/1/06 DATE

BY THE ENGINEER:

I/WE CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL, REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST EMPLOY A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

ENGINEER - DONALD A. MASON, P.E. # 21443 12/23/05 DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL.

USDA - NATURAL RESOURCES CONSERVATION SERVICE 1/1/06 DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT 1/1/06 DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS

W. J. ... 1-19-06 DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

C. ... 1/31/06 DATE

O. ... 1/12/06 DATE

NO.	DATE	REVISION

BENCHMARK ENGINEERING, INC.
ENGINEERS • LAND SURVEYORS • PLANNERS
8480 BALTIMORE NATIONAL PIKE # SUITE 418
ELLCOTT CITY, MARYLAND 21043
PHONE: 410-465-6105 • FAX: 410-465-6644
WWW.BEI-CIVILINGINEERING.COM

OWNER/DEVELOPER: C/O JAMES H. SELFRIDGE BUILDERS, INC.
14045 GARED DRIVE
GLENWOOD, MARYLAND 21738

PROJECT: CLARKS MEADOW
LOTS 1-28
NON-BUILDABLE PRESERVATION PARCELS 'A' THRU 'G'
FOREST MITIGATION BANK
A RESUBDIVISION OF CLARKS WOODS I, LOT 4, PLAT NO. 14203
LOCATION: TAX MAP: 21 PARCEL: 227
GRID: 17 ZONED: RC-DEO
ELECTION DISTRICT NO. HOWARD COUNTY, MARYLAND

TITLE: STORMWATER MANAGEMENT DETAILS
FACILITY #3

DATE: JANUARY, 2006 PROJECT NO. 1736
DES: DBT/MCR DRAFT: DBT/MCR CHECK: CAM SCALE: 1" = 50' SHEET 18 OF 19

AS-BUILT F-06-29

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: Dorsey Mill Road/Woodmont SWM Location: Howard County, Maryland

Job #: SW2-B1 0308A

Date Started: 02-23-03

Hammer V.L.: 140 Lbs. Hammer Drop: 30 inches. Pipe Size: 2.0 inches OD.

ELEV.	SOIL DESCRIPTION	DEPTH	SCALE	CON.	SAMPLE	NO.	REC.	BORING & SAMPLING NOTES
0.0	SURFACE	0.0						2" Topsoil
1.0	Brown damp medium stiff micaceous silt with trace of sand (SILT) ML	1.0		I	2-3	1	10"	No groundwater encountered while drilling
2.5		2.5		I	2-6	2	11"	
4.5		4.5		D	4-7	3	15"	Caved in at 6.7' at Completion
12.0		12.0		D	3-4	4	6"	
15.0	Bottom of Test Hole at 15.0'	15.0						

STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: Dorsey Mill Road/Woodmont SWM Location: Howard County, Maryland

Job #: SW2-B2 0308A

Date Started: 02-23-03

Hammer V.L.: 140 Lbs. Hammer Drop: 30 inches. Pipe Size: 2.0 inches OD.

ELEV.	SOIL DESCRIPTION	DEPTH	SCALE	CON.	SAMPLE	NO.	REC.	BORING & SAMPLING NOTES
0.0	SURFACE	0.0						2" Topsoil
1.0	Brown damp medium stiff silt with trace of clay (SILT) ML	1.0		I	2-3	1	10"	No groundwater encountered while drilling
2.5		2.5		I	1-3	2	18"	
7.0		7.0		I	2-0	3	18"	
15.0	Bottom of Test Hole at 15.0'	15.0						

STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: Dorsey Mill Road/Woodmont SWM Location: Howard County, Maryland

Job #: SW2-B3 0308A

Date Started: 02-23-03

Hammer V.L.: 140 Lbs. Hammer Drop: 30 inches. Pipe Size: 2.0 inches OD.

ELEV.	SOIL DESCRIPTION	DEPTH	SCALE	CON.	SAMPLE	NO.	REC.	BORING & SAMPLING NOTES
0.0	SURFACE	0.0						2" Topsoil
1.0	Brown damp medium stiff silt with trace of clay (SILT) ML	1.0		I	2-3	1	10"	No groundwater encountered while drilling
2.5		2.5		I	2-4	2	18"	
7.0		7.0		I	3-4	3	18"	
15.0	Bottom of Test Hole at 15.0'	15.0						

STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: Dorsey Mill Road/Woodmont SWM Location: Howard County, Maryland

Job #: SW2-B4 0308A

Date Started: 02-23-03

Hammer V.L.: 140 Lbs. Hammer Drop: 30 inches. Pipe Size: 2.0 inches OD.

ELEV.	SOIL DESCRIPTION	DEPTH	SCALE	CON.	SAMPLE	NO.	REC.	BORING & SAMPLING NOTES
0.0	SURFACE	0.0						2" Topsoil
1.0	Brown damp medium stiff silt with trace of clay (SILT) ML	1.0		I	2-3	1	10"	No groundwater encountered while drilling
2.5		2.5		I	2-3	2	18"	
4.5		4.5		D	2-4	3	18"	
15.0	Bottom of Test Hole at 15.0'	15.0						

STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: Dorsey Mill Road/Woodmont SWM Location: Howard County, Maryland

Job #: SW2-B5 0308A

Date Started: 02-23-03

Hammer V.L.: 140 Lbs. Hammer Drop: 30 inches. Pipe Size: 2.0 inches OD.

ELEV.	SOIL DESCRIPTION	DEPTH	SCALE	CON.	SAMPLE	NO.	REC.	BORING & SAMPLING NOTES
0.0	SURFACE	0.0						2" Topsoil
1.0	Brown damp medium stiff silt with trace of clay (SILT) ML	1.0		I	2-2	1	10"	No groundwater encountered while drilling
4.5		4.5		I	2-4	2	10"	
15.0	Bottom of Test Hole at 15.0'	15.0						

STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: Dorsey Mill Road/Woodmont SWM Location: Howard County, Maryland

Job #: SW2-B6 0308A

Date Started: 02-23-03

Hammer V.L.: 140 Lbs. Hammer Drop: 30 inches. Pipe Size: 2.0 inches OD.

ELEV.	SOIL DESCRIPTION	DEPTH	SCALE	CON.	SAMPLE	NO.	REC.	BORING & SAMPLING NOTES
0.0	SURFACE	0.0						2" Topsoil
1.0	Brown moist medium dense sandy silt (SILT) ML	1.0		I	1-3	1	14"	No groundwater encountered while drilling
2.5		2.5		I	2-2	2	11"	
15.0	Bottom of Test Hole at 15.0'	15.0						

STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: Dorsey Mill Road/Woodmont SWM Location: Howard County, Maryland

Job #: SW2-B7 0308A

Date Started: 02-23-03

Hammer V.L.: 140 Lbs. Hammer Drop: 30 inches. Pipe Size: 2.0 inches OD.

ELEV.	SOIL DESCRIPTION	DEPTH	SCALE	CON.	SAMPLE	NO.	REC.	BORING & SAMPLING NOTES
0.0	SURFACE	0.0						2" Topsoil
1.0	Brown moist medium dense sandy silt (SILT) ML	1.0		I	1-3	1	10"	No groundwater encountered while drilling
2.5		2.5		D	18-31-34	2	17"	
7.0		7.0		D	6-12-13	3	12"	
15.0	Bottom of Test Hole at 15.0'	15.0						

STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: Dorsey Mill Road/Woodmont SWM Location: Howard County, Maryland

Job #: SW2-B8 0308A

Date Started: 02-24-03

Hammer V.L.: 140 Lbs. Hammer Drop: 30 inches. Pipe Size: 2.0 inches OD.

ELEV.	SOIL DESCRIPTION	DEPTH	SCALE	CON.	SAMPLE	NO.	REC.	BORING & SAMPLING NOTES
0.0	SURFACE	0.0						2" Topsoil
1.0	Brown wet soft silt with trace of clay (SILT) ML	1.0		I	2-3	1	4"	No groundwater encountered while drilling
2.5		2.5		I	8-10-13	2	12"	
7.0		7.0		I	10-11-10	3	10"	
15.0	Bottom of Test Hole at 15.0'	15.0						

STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: Dorsey Mill Road/Woodmont SWM Location: Howard County, Maryland

Job #: SW2-B9 0308A

Date Started: 02-24-03

Hammer V.L.: 140 Lbs. Hammer Drop: 30 inches. Pipe Size: 2.0 inches OD.

ELEV.	SOIL DESCRIPTION	DEPTH	SCALE	CON.	SAMPLE	NO.	REC.	BORING & SAMPLING NOTES
0.0	SURFACE	0.0						2" Topsoil
1.0	Brown wet soft silt with trace of clay (SILT) ML	1.0		I	2-2	1	8"	No groundwater encountered while drilling
2.5		2.5		I	3-4	2	12"	
7.0		7.0		I	5-5-8	3	14"	
15.0	Bottom of Test Hole at 15.0'	15.0						

STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: Dorsey Mill Road/Woodmont SWM Location: Howard County, Maryland

Job #: SW2-B10 0308A

Date Started: 02-24-03

Hammer V.L.: 140 Lbs. Hammer Drop: 30 inches. Pipe Size: 2.0 inches OD.

ELEV.	SOIL DESCRIPTION	DEPTH	SCALE	CON.	SAMPLE	NO.	REC.	BORING & SAMPLING NOTES
0.0	SURFACE	0.0						2" Topsoil
1.0	Brown damp soft silt with trace of sand (SILT) ML	1.0		I	2-4	1	12"	No groundwater encountered while drilling
2.5		2.5		I	8-10-9	2	16"	
7.0		7.0		I	4-4-8	3	12"	
15.0	Bottom of Test Hole at 15.0'	15.0						

STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: Dorsey Mill Road/Woodmont SWM Location: Howard County, Maryland

Job #: SW4-B1 0308A

Date Started: 02-24-03

Hammer V.L.: 140 Lbs. Hammer Drop: 30 inches. Pipe Size: 2.0 inches OD.

ELEV.	SOIL DESCRIPTION	DEPTH	SCALE	CON.	SAMPLE	NO.	REC.	BORING & SAMPLING NOTES
0.0	SURFACE	0.0						2" Topsoil
1.0	Brown damp soft silt with trace of clay (SILT) ML	1.0		I	1-2	1	10"	No groundwater encountered while drilling
2.5		2.5		I	6-7	2	6"	
7.0		7.0		I	3-4	3	14"	
15.0	Bottom of Test Hole at 15.0'	15.0						

STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS

APPROVED: DEPARTMENT OF PUBLIC WORKS
 APPROVED: DEPARTMENT OF PLANNING AND ZONING

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: Dorsey Mill Road/Woodmont SWM Location: Howard County, Maryland

Job #: SW4-B2 0308A

Date Started: 02-24-03

Hammer V.L.: 140 Lbs. Hammer Drop: 30 inches. Pipe Size: 2.0 inches OD.

ELEV.	SOIL DESCRIPTION	DEPTH	SCALE	CON.	SAMPLE	NO.	REC.	BORING & SAMPLING NOTES
0.0	SURFACE	0.0						2" Topsoil
1.0	Brown damp soft silt with trace of clay (SILT) ML	1.0		I	2-3	1	10"	No groundwater encountered while drilling
2.5		2.5		I	2-2	2	10"	
7.0		7.0		I	5-7	3	14"	
15.0	Bottom of Test Hole at 15.0'	15.0						

STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: Dorsey Mill Road/Woodmont SWM Location: Howard County, Maryland

Job #: SW4-B3 0308A

Date Started: 02-24-03

Hammer V.L.: 140 Lbs. Hammer Drop: 30 inches. Pipe Size: 2.0 inches OD.

ELEV.	SOIL DESCRIPTION	DEPTH	SCALE	CON.	SAMPLE	NO.	REC.	BORING & SAMPLING NOTES
0.0	SURFACE	0.0						2" Topsoil
1.0	Brown damp soft silt with trace of clay (SILT) ML	1.0		I	2-4	1	12"	No groundwater encountered while drilling
2.5		2.5		I	8-10-9	2	16"	
7.0		7.0		I	4-4-8	3	12"	
15.0	Bottom of Test Hole at 15.0'	15.0						

STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: Dorsey Mill Road/Woodmont SWM Location: Howard County, Maryland

Job #: SW4-B4 0308A

Date Started: 02-24-03

Hammer V.L.: 140 Lbs. Hammer Drop: 30 inches. Pipe Size: 2.0 inches OD.

ELEV.	SOIL DESCRIPTION	DEPTH	SCALE	CON.	SAMPLE	NO.	REC.	BORING & SAMPLING NOTES
0.0	SURFACE	0.0						2" Topsoil
1.0	Brown damp soft silt with trace of sand (SILT) ML	1.0		I	2-4	1	12"	No groundwater encountered while drilling
2.5		2.5		I	8-10-9	2	16"	
7.0		7.0		I	4-4-8	3	12"	
15.0	Bottom of Test Hole at 15.0'	15.0						

STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: Dorsey Mill Road/Woodmont SWM Location: Howard County, Maryland

Job #: SW4-B5 0308A

Date Started: 02-24-03

Hammer V.L.: 140 Lbs. Hammer Drop: 30 inches. Pipe Size: 2.0 inches OD.

ELEV.	SOIL DESCRIPTION	DEPTH	SCALE	CON.	SAMPLE	NO.	REC.	BORING & SAMPLING NOTES
0.0	SURFACE	0.0						2" Topsoil
1.0	Brown damp soft silt with trace of sand (SILT) ML	1.0		I	2-4	1	12"	No groundwater encountered while drilling
2.5		2.5		I	8-10-9	2	16"	
7.0		7.0		I	4-4-8	3	12"	
15.0	Bottom of Test Hole at 15.0'	15.0						

STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS

NO. DATE REVISION

BENCHMARK ENGINEERING, INC.
 840 BALTIMORE NATIONAL PIKE & SUITE 418
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 phone: 410-465-6105 • fax: 410-465-6644
 www.bel-civilengineering.com

OWNER/DEVELOPER: C/O JAMES H. SELFRIDGE BUILDERS, INC. 14045 GARED DRIVE GLENWOOD, MARYLAND 21738

PROJECT: CLARKS MEADOW LOTS 1-26 NON-BUILDABLE PRESERVATION PARCELS 'A' THRU 'G' FOREST MITIGATION BANK A RESUBDIVISION OF CLARKS WOODS I, LOT 4, PLAT NO. 14203

LOCATION: TAX MAP: 21 PARCEL: 227 GRID: 17 ZONED: RC-DEO ELECTION DISTRICT NO. 4 HOWARD COUNTY, MARYLAND

TITLE: SOIL BORING LOGS

DATE: JANUARY, 2006 PROJECT NO. 1736

DESIGN: DBT DRAFT: DBT CHECK: CAM SCALE: 1" = 50' SHEET 19 OF 19